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SAMOTHRACE: FOURTH PRELIMINARY REPORT

(PLATES 1-18)

THE excavations of the Archaeological Research Fund of New York University under the auspices of the American School of Classical Studies at Athens were continued during the summer of 1949.¹ We carried on our exhaustive exploration of the main area of the Sanctuary of the Great Gods² and concentrated chiefly on the two areas in which we had worked during the previous year: the regions of the great rotunda dedicated by Queen Arsinoe and of the so-called New Temple. The results of the campaign were again gratifying. They have considerably enlarged our knowledge of the nature of this cult which gradually ceases to be the most mysterious of all the antique mystery religions. They have added important new evidence in regard to the origin and early phases of the famous sanctuary. They have furnished architectural data of considerable significance through discoveries in the New Temple. They have presented us with the remains of a hitherto unknown Greek building. And

¹ The fourth campaign was carried out from June 14 through August 5, 1949. The staff, under my direction, again included two veteran members: Dr. Phyllis Williams Lehmann, Associate Professor in the Art Department of Smith College, who again served as Assistant Field Director especially in charge of the "New Temple," and Stuart M. Shaw of the Metropolitan Museum of Art who directed the architectural work. Dr. Phyllis Pray Bober, Lecturer at Washington Square College, and Mrs. Elsbeth Dusenbery of the Institute of Fine Arts of New York University were again with us, as they had been in the previous campaign. Mr. Jack Wassermann, of the Institute, joined us as a new member. For a short time, we also enjoyed the help of Mr. Roy Fraser of the British School in Rome who assisted Mr. Shaw in the architectural work in the New Temple. To our delight, the Greek Government again appointed Mr. Vassilios Kallipolitis, now in the Archaeological Service in Salonika, as its representative. His invaluable experience, knowledge and interest and his keen observation have greatly facilitated our work and helped us to achieve the results submitted in this report. Our group as a whole worked in close and fruitful cooperation.

Our loyal, intelligent and energetic foreman, Georgios Nikolaides, was as efficient as ever under difficult circumstances and in trying tasks. Thanks to the courtesy of Mr. Christos Karouzos and of the Royal Greek Ministry of Education, we had the assistance of M. Kontogeorgios, the most experienced and able restorer of the Athens National Museum.

We gratefully acknowledge the assistance of the following institutions which have enabled us to carry on: The Bollingen Foundation (by granting us the necessary means, again supplemented by a generous anonymous private donation); the Royal Greek Ministry of Education; the American School of Classical Studies at Athens; the Administration of New York University; the American Express Company in New York and Athens. Many individuals in these organizations as well as others have contributed to our work through practical assistance, advice and scholarly information. We wish to name particularly: Bernard Ashmole, John D. Barrett, Sir John Beazley, John Caskey, Jean Charbonneaux, Harry Woodburn Chase, Walter W. S. Cook, Fritz Eichler, Lady Gabriel, Edwin H. Land, Benjamin D. Meritt, Demetrios Pappaeustratiou, Lucy Talcott, Homer Thompson, and Daniel Woods.

² For previous reports see *Hesperia*, XIX, 1950, pp. 1 ff. with bibliography.

finally, for the first time since the French and Austrian expeditions of the mid nineteenth century, they have led to the discovery of important Greek sculptures which now are sheltered in the local museum previously built by us.

We completed our work in the region of the Arsinoeion by excavating along its western and southern periphery. In the latter direction we explored the entire roughly triangular area between the Arsinoeion, the western riverbed of the sanctuary, and the central terrace,³ impressive remnants of which had always emerged from the wilderness of the secluded valley (Pls. 2a and 3a). In spite of the terrible natural catastrophe and willful destruction which had hit this region with particular violence, we were able to uncover important remnants *in situ* and to trace the development of the area. For the sake of brevity, it seems preferable to outline these results in a chronological historical survey rather than to submit the complicated set of entangled observations as they developed in the process of exploration.

Before classical times there was, in this region, a steep rocky slope descending from the upper hill towards the riverbed. This slope was rather regular in most of the area later covered by the Arsinoeion. But to the southeast of it there arose a precipice with a rocky cliff (Pl. 5a, right) projecting from it at a distance of about 15 m. from the riverbed, and a kind of glade framed by rocky slopes on the north, east and south and closed off to the west by hills beyond the riverbed. The natural access to this area was from the west through a saddle in the western hills, between the later Stoa and the "Ruinenviereck" of the western sanctuary.⁴ In the glade itself and near its big basalt boulders,⁵ intrusions in the porphyry masses of the rocky scenery, here and there emerged to a height of 4 to 5 feet from the weathered rocks around them. It must have been a rather startling scene and, if small in scale, one that easily might have induced early peoples to visualize the presence of divine powers in nature.

In 1948 we uncovered one of these great boulders having steps leading up to its partly levelled-off surface and a channel around part of its periphery beneath the eastern part of the rotunda. We explained it as a "rock altar" of the type known especially from Phrygia, and as a striking document of the root of the Samothracian religion in the rites of the Great Mother, the Lady of the Rocks variously identified by ancient writers as Kybele, Rhea, or Demeter, and called Axieros in Samothrace, where her seated image flanked by lions appears on coins. Her sacred rock, later buried beneath though included within the rotunda of Arsinoe, had been made a place of worship by the natives before Greek settlers came to Samothrace. It had been included by these natives in a "cyclopean" terrace, the retaining wall of which we

³ See Conze, A. and others, *Archaeologische Untersuchungen in Samothrake* (hereafter quoted as *Samothrake*) II, pl. 1 (= *A.J.A.*, XLIII, 1939, p. 136, fig. 2).

⁴ *Ibid.*

⁵ We are greatly indebted to Dr. Frederick Pough of the American Museum of Natural History for examining and identifying samples of stone. His judgment is the basis of the terminology used in this report.

uncovered to a considerable length.⁶ In 1949 we found the southern end of this cyclopean wall outside and to the south of the Arsinoeion, where it is preserved to a length of *ca.* 2 m. and to a height of 1.25 m., the southern end being wedged into a sloping cutting at the northern side of the previously mentioned precipitous cliff (Pls. 1 g, 5a, center). In the seventh century B. C., after Greeks had settled in Samothrace, they built over this native sanctuary an open air double precinct the northern section of which contained the old sacred rock, while the southern part included a sacrificial pit to the underworld gods. The foundations of the eastern and western boundaries of that early Greek precinct and part of its dividing wall with the remnants of a yellow tufa orthostate structure once supporting mudbrick walls were found inside the Arsinoeion.⁷

The character of the cult in this early age and the religious explanation offered by us was further corroborated and elucidated by discoveries made in 1949. In the depths outside the Arsinoeion, we uncovered the well-preserved sturdy substructure of the southwestern corner of the seventh century double precinct (Pls. 1 a, 2a, 3b, 5b). Posed on bedrock at a level 4.20 m. beneath the euthynteria of the rotunda and preserved to a height of 1.15 m., it is built of large blocks. Its position shows that the southern wall of the double precinct coincided with the southern foundation of the rotunda.

In the immediate vicinity of this corner and to the west of it, we discovered the most striking and unexpected confirmation of the ritual purpose of the sacred rock previously suggested. Here another basalt rock with a diameter of *ca.* 2 m. emerged to a height of 1.50 m. (Pls. 1 h, 3b). On the side facing the double precinct a smaller boulder had been levelled off 1.20 m. beneath the top of the sacred rock (Pls. 3b, 4a). It offers an obvious place on which a person could stand. Between it and the double precinct, the seventh century Greeks spread a rectangular pavement of yellow tufa slabs of the same variety used in the orthostate structure of the double precinct and measuring 2.14 m. from northwest to southeast, by 2.25 m. from northeast to southwest (0.21 m. thick). At a level just one step (0.32 m.) beneath the flattened stepping stone this tufa floor accompanies its irregular outline but leaves around it a narrow channel (0.065 m. wide) into which libations could be poured by a person standing on the prothesis rock. The libations entered a triangular cavity near the southern corner of the pavement and the channel encircling the rock was covered by small stones wedged in between it and the pavement. At a slight distance and to the south of the corner of the double precinct, another boulder was perpendicularly cut on its north and south sides and seems to have been included in a kind of parapet wall framing a descending avenue of access to this sacred rock sanctuary along the southern side of the double precinct.

⁶ *Hesperia*, XIX, 1950, pp. 8 ff., figs. 1, 15-19.

⁷ *Ibid.*, pp. 9 ff., figs. 1, 14-17, 20, 21.

The sacred character of this rock and the libation rites performed here are even more strikingly evident than were those of the other rock previously discovered in the double precinct—and they are basically the same. What remains uncertain, however, is tantalizing enough. Was the divinity worshipped here and there the same? Had the sacred rock outside the double precinct already been a place of native worship before the arrival of the Greeks? We have not found any evidence for such worship and one is tempted to think that the Greeks, when they established their initial mystery rites and included the pre-Greek rock altar in an adyton, may have installed a public substitute outside the exclusive double precinct for the continued use of those who were not initiated.

As has been stated before,⁸ the double precinct had but a short life. We have found at its southwestern corner traces of destruction by fire, presumably at a time shortly after 600 B.C. There followed a prolonged intermediate period. Several poor foundations of various successive structures have been discovered beneath the Sacristy to the south of the Anaktoron and in the interior of the Arsinoeion.⁹ The foundations of various buildings or enclosures of that period belong to several building phases of the sixth century B.C. They are flimsy fieldstone foundations built over the foundations of the ruined double precinct. Near the southwestern periphery of the rotunda and almost parallel to it, we uncovered one such wall in 1949 (Pls. 1 **b**, 3b, 5b). It is the continuation of a similar foundation discovered in 1948 inside the Arsinoeion¹⁰ posed obliquely on the foundation of the western wall of the double precinct. Over the strong substructure of the corner of the double precinct the southwestern foundation and the western corner of what evidently was once an enclosure around the bothros has now been laid bare. For it is evident that the cult continued without interruption although during this phase the buildings were extremely primitive.

We had already ascertained this continuity inside the Arsinoeion by the discovery of an archaic altar foundation over a seventh century place of sacrifice in the northern section of the double precinct.¹¹ Now we have found two more sixth century sacrificial places outside the Arsinoeion. The earlier yellow floor around the sacred rock (Pls. 3b, 4a) was by this time buried under the ground. But at a slight distance to the southeast of it and about 3 m. south of the corner of the double precinct and the intermediate wall above it, we found *in situ* on a stamped earth floor the lower part of a sizable and unique archaic terracotta altar (Pls. 1 **c**, 4e, 5b).¹² It is circular, hollow on the inside, and flares upward towards a vertical central cylinder the lower end of

⁸ *Ibid.*, pp. 12 f.

⁹ *A.J.A.*, XLIV, 1940, pp. 349 f.; *Hesperia*, XIX, 1950, p. 12, figs. 1, 14.

¹⁰ *Ibid.*

¹¹ *Ibid.*, p. 13, figs. 1, 15, 23.

¹² Acc. No. 49.858 (the fragments of the upper edge: 49.672 A-B). Lower diam.: 0.37 m., preserved ht.: 0.18 m. The upper edge has a simple cymation between two convex mouldings and, under it, part of the curved wall flaring backward towards the narrower central cylinder is preserved.

which is preserved. Two of its superimposed round mouldings are decorated with a moulded beading and its entire surface was painted a deep red. Its original height is unknown. But two preserved fragments of the upper edge show that an upper part corresponding somewhat to the lower one flared outward from the central cylinder toward a flat surface which may have had a cavity or a hole in the center. Traces of fire on the surface show that this was an altar. In the vicinity, fragments of two other round terracotta altars¹³ were found scattered in later layers, and it would seem that not far from the old sacred rock outside the Arsinoeion there was a set of round clay altars. Whether they were connected with the sacred rock is uncertain. Furthermore, we found scattered bones of sheep, pigs and cattle in this region in considerable quantity.¹⁴ The date of the preserved altar may be connected with a handsome black-glazed kylix of Ionic workmanship, the fragments of which were found in a thin black layer evidently dating from the period of the inauguration of the altar (Pl. 6a), seemingly about 560 B.C.¹⁵

Another sacrificial place was installed in this period, too, it seems, at some distance to the north of the sacred rock on the slope to the west of the Arsinoeion. It would appear that in the intermediate period most of the sacred rock lay buried, though its top probably still emerged for some time afterward. The sacrificial place west of the later Arsinoeion and northwest of the rock (Pls. 1 i, 2b, 4b) was on an even higher level. Here a stamped earth floor was framed by a setting of small stones of which only the southern part is preserved to a length of 2.80 m. Later altars in this region following the orientation of this frame indicate the sacrificial function of the place from the sixth century B.C. on. Bones of sheep found over the earth floor attest to sacrifices brought here at that time. Part of the foundation of the third of three successive phases¹⁶ uncovered in the northwestern corner of the late archaic Sacristy to the northeast of the Arsinoeion also belongs to this intermediate period of the sixth century. All these structures represent an interlude in which the cult seems to have spread around the area of the two old sacred rocks in a number of sacrificial places. The impression is one of extreme poverty and of quickly renewed flimsy structures in contrast with the fine and ambitious building activity of the seventh century. To be sure, the terracotta altar is an impressive but modest monument. The only more ambitious relic of this period thus far known from Samothrace is the famous archaic

¹³ Acc. Nos. 49.986 and 49.1032, the former from the Arsinoeion fill, the latter from the yellow fill of the fifth century mentioned below.

¹⁴ For the identification of these and other bones of sacrificial animals mentioned in this report, we are greatly indebted to Dr. Edwin Colbert of the American Museum of Natural History.

¹⁵ Acc. No. 49.887: restored: part of the upper section with one handle. Entirely black-glazed with the exception of the foot, covered beneath and around its edge with a slip of fine orange clay. Diam.: 0.149 m.; Ht.: 0.08 m.

¹⁶ For the two earlier phases see walls A, B in *A.J.A.*, XLIV, 1940, p. 349, figs. 3, 22. (Cf. *Hesperia*, XIX, 1950, pp. 12 f.).

limestone relief of Agamemnon and his companions in the Louvre and it may as well have belonged to an altar as to the frame of a bothros or a seat.¹⁷

But the sudden ascendancy of the sanctuary around 500 B.C. is now amply documented throughout its northern portion. Its most conspicuous feature is the archaic initiation hall, the Anaktoron.¹⁸ Some distance to the south of this building which for centuries to come dominated this part of the sanctuary, we had previously discovered the northwestern corner of the oldest sacristy.¹⁹ In 1949, we completed its exploration in order to transport blocks from the superstructure of the Arsinoeion that had accumulated to the south, to the triangle between the Hellenistic Sacristy, the Arsinoeion and the terrace walls to the east. Here, at a distance of 4.88 m. from the northern foundation of the archaic Sacristy we uncovered its southern foundation wall (0.50 m. wide) preserved to a length of 3.50 m. (Pl. 4c). The archaic Sacristy, whose eastern boundary was destroyed by later builders, formed a square of about 4.90 m. inner width.

With the erection of these buildings, which attest the full development of the mystery rites, there went an ambitious planning program for the entire area. In 1948 we uncovered an impressive terrace wall of polygonal rocks which formed a peristasis to the entire eastern and northern sides of the Anaktoron.²⁰ In 1949 we found the lower part of a wall of the same type and undoubtedly of the same period (Pl. 5a) under the southernmost section of the later concrete terrace wall to the east and south of the Arsinoeion.²¹ It is preserved to a length of 6 m. and a height of 2 to 3 courses. Evidently this slightly curving terrace wall originally continued to a point near the southeastern corner of the archaic Sacristy. One may conjecture that in the interval between the Anaktoron and the old Sacristy (ca. 4 m. wide), a road led up

¹⁷ For this relief see my discussion in *Hesperia*, XII, 1943, pp. 130 ff. and, more recently, Jean Bousquet in *Mélanges d'archéologie et d'histoire Charles Picard*, vol. I, Paris, 1949, pp. 105 ff. M. Bousquet finds my interpretation of the relief unacceptable primarily because he thinks that Agamemnon could not be represented seated in the underworld (though in other underworld scenes seated figures do appear). He thinks that the creature is not a chthonic snake but an orientalizing griffin-head protome, though there is no space on the relief for one necessary crowning element of such a head. Such an element would have been anachronistic in a work that, given its drapery style, cannot antedate the middle of the sixth century (see, also, now: Richter, G. M. A., *Archaic Greek Art*, Oxford, 1949, p. 96), although Bousquet dates it at the beginning of the century. He suggests that Agamemnon is represented as receiving the purple band of the Samothracian mystery initiation and that the relief formed part of a marble throne supporting an image of Hermes-Kadmilos like the throne with a herm on it on coins of Ainos. He quotes the Ludovisi Throne as an example of a throne with mythological reliefs, though this monument is now generally, and quite safely, interpreted as a fragment of an altar. Though I do not exclude an interpretation of the monument as a throne, at this time, I cannot follow his argument and still believe my interpretation to be preferable to his.

¹⁸ *A.J.A.*, XLIII, 1939, pp. 135 ff.; XLIV, 1940, pp. 330 f.

¹⁹ *Ibid.*, pp. 349 f., figs. 22 (r), 23, 29.

²⁰ *Hesperia*, XIX, 1950, pp. 3 f., figs. 1, 3.

²¹ *A.J.A.*, XLIV, 1940, p. 330, fig. 3; *Hesperia*, XIX, 1950, p. 4.

from the level of these buildings to the upper hillside supported by this great terracing which extended over an area of *ca.* 50 m.

Remnants of a third terrace wall of the same date were found—again beneath a concrete wall of the Hellenistic period (Pls. 2b, 4b and d) to the west of the Arsinoeion. Here, too, the late archaic builders defined the great lines that conditioned the later appearance of the Sanctuary. The inner side of a strong retaining wall of the same archaic type, preserved at some points to a height of 1.50 m., was uncovered in a length of *ca.* 5 m. under the Hellenistic terrace wall. This wall was built as a retaining wall for the region later occupied by the rotunda and, supporting an earth fill, it seems to have ascended from the riverbed to a level of *ca.* 2 m. above it opposite the southwestern part of the Arsinoeion. It must have continued as a retaining wall farther northward to the west of the Anaktoron where, however, no traces of it seem to be preserved.

This river terrace now formed the western boundary of the sacrificial area which had replaced the seventh century double precinct and its surroundings to the west and south. In this area, a sacrificial place mentioned above to the west of the later Arsinoeion, continued in use having an altar posed on a fieldstone foundation, 1.80 m. square, at a level 0.40 m. above that of the intermediate archaic period (Pls. 1 i, 2b, 4b). Another field-stone foundation of which the curvilinear southwest periphery is preserved possibly belongs to the same age, around 500 B.C. It starts slightly to the east at a height 2 feet above the seventh century level and halfway between the intermediate curved wall over the seventh century precinct corner and the above described terracotta altar which must no longer have been in use when this foundation was built near by. Thus it seems likely that this last foundation supported a substitute altar (Pls. 1 d, 5b).

In the fifth century B.C., the region was framed by sturdy rock retaining walls along the riverbed and, in the background, the upper hillside was dominated by the long hall of the Anaktoron with its hipped roof and three doors on its western side. At a slight distance to the south one saw the archaic Sacristy in the background. In the region of the later Arsinoeion and to the west and south of it, at least three altars and a pit to the underworld gods were scattered on the sloping ground. Farther to the south, there was still a kind of glade in the background of which a rocky cliff emerged, while near it part of the pre-Greek cyclopean wall was visible. But the earlier structures of this region lay buried and if some of the aboriginal sacred rocks and other minor boulders still emerged from the ground, only memory could retain a dim picture of the original wild scenery and, as on the broader scale of Delphi, possibly give rise to stories of a chasm or cave which we find reflected in literature.²²

²² The mysterious Cerynthian Cave may have been, like the chasm beneath the temple of Delphi, a legendary rather than a real cave. After our discovery of the original rocky glade, overshadowed by steep hills, as the center of the earliest cult, this seems the most natural assumption.

All the sources are late, if learned. Various writers indicate that the "cave" was part of the

In this whole area there is no trace of building activity during the fifth and fourth centuries, though the literary sources, sculptural and other finds indicate the flourishing state of the cult and its popularity in the Greek world. We know of a restoration of the Anaktoron in the second half of the fifth century.²³ In 1949 we found a compact yellow layer, dated by its finds around 400 B.C., covering the area of the previously mentioned curved foundation, the archaic terracotta altar, and the upper part of the great sacred rock near the riverbed, towards which this fill slanted downward from the upper hillside to the southern end of the archaic retaining wall along its edge. It seems likely that an oblique and strongly slanting fieldstone packing (Pl. 5a) which now covers the lower part of the cyclopean wall near the rocky cliff, and antedates the Arsinoeion, belongs to this phase and supported the upper end of a road or ramp that led up from the riverbed to the level of the archaic Sacristy, while another road evidently ascended along the archaic retaining wall northward towards the façade of the Anaktoron.

The placing of Queen Arsinoe's great rotunda over a large section of the earliest sanctuary gave an entirely different aspect to the region in later antiquity. Our excavation around its western and southern periphery (Pls. 2a, 4d) and the resultant exposure of its gigantic limestone foundation suggests the dominating appearance of the building even now that its superstructure has collapsed. In antiquity this foundation was hidden by slanting earth-fills. On the western side, towards the riverbed, they were supported by a remarkable concrete retaining wall.²⁴ In part this wall (Pls. 1, 4d) was built upon and followed the course of the late archaic rock retaining wall. It emerged above the riverbed to the west of the Arsinoeion to a considerable height. It is now exposed to a length of 11 m. as it runs northward from a point slightly to the south of the area of the Arsinoeion. It was at least 4 m. high at some points, but

famous Samothracian cult. Lycophron, *Alexandra*, 77, and Scholia makes Dardanos, who otherwise is said to have transferred the cult of the Idean Mater from Samothrace to Asia, depart from the *ἄντρον*, fortress of the Korybantes, and the *Anon. Paraphrasis antiquior Lycophronis*, ll. 75 f. explains it as a cave of Hera or Hekate and "the stony and shadowy dwelling of the demons about Rhea." See also, F. Chapouthier, *Les Dioscures au service d'une déesse*, Paris, 1936, p. 171. The cave of Hekate occurs as a place of initiation in the Korybantic (= Kabeiric) rites in Samothrace in Schol. Aristoph., *Pax*, 277/8; quoting Lycophron, Nonnus, who knew a good deal about Samothrace, *Dionysiaca*, XLIII, 311, speaks of the Samothracian "cavern of the Kabeiroi" and, in a passage full of learned details from some earlier source, he speaks of "divine Zerynthos of the unresting Korybantes . . . where the rocks (*ἐρίπναι*) are thronged with torchbearing mystics of the Maid." (*Ibid.*, XIII, 400 f.). One wonders whether Hekate is not another name of either Axieros or Axiokersa, added to Rhea, Kybele, Hera, and Demeter. Or is it owing to a misunderstanding of Lycophron, who speaks of the goddess who slaughters dogs, without giving her name? The paraphraser himself was dubious whether she was not Hera or Rhea rather than Hekate. Whether *κυνοσφαγής* is here necessarily related to sacrifices of dogs seems questionable. So far we have no evidence of such sacrifices.

²³ *A.J.A.*, XLIV, 1940, p. 332.

²⁴ See *Samothrake*, I, pl. 56; II, pl. 1.

it may have descended in height towards its southern end. Originally, the wall probably terminated at about the same point as at present.²⁵ Inside the wall a ramp or stairway which has left no traces must have ascended to the level of the Arsinoeion and to a road leading around it towards the Anaktoron and the Sacristy.

In a later, late Hellenistic or Roman period, this retaining wall was reinforced on the outside with a face slightly diverging in direction and pierced by weep-holes.

Between the concrete wall and the southwestern periphery of the Arsinoeion, the archaic altar on a fieldstone foundation (Pls. 1 i, 2b, 4b) described above, was raised to the new level. Another fieldstone foundation still preserved to a height of 1.60 m. was built on top of its archaic forerunner between the new retaining wall and the Arsinoeion foundation and it was slightly enlarged toward the east becoming rectangular instead of square.

This altar stood some distance to the west of the entrance to the Arsinoeion which was situated almost exactly over the southwestern corner of the seventh century precinct. In this section we found blocks, evidently connected with the door and including a part of its threshold, that had fallen down on the slope towards the riverbed. A large handsome fragmentary console with floral decoration of fine workmanship akin to the best decorative pieces of the Arsinoeion probably belongs to this door, too (Pl. 6b). We rescued this piece from the ruined Monastery of Hagios Christos, where we found it lying broken on the ground.

On the other side, the door was flanked by a curious shaft (Pls. 1 e, 5a, left). Although not bonded into the Arsinoeion foundation which forms one of its inner walls, this shaft was built with the original structure and included in the earth-fill surrounding the Arsinoeion. It is almost square, measuring on the inside 0.80 x 0.90 m. and it is now preserved to the height of the fifth foundation course beneath the euthynteria level, to which it certainly originally extended. It evidently goes down to the natural soil accompanying the entire substructure of the Arsinoeion. Though we have not yet reached its deepest level, it is already evident that the shaft was open in antiquity. We found it filled above with stones that had fallen in from its own upper frame in the final destruction. Beneath this debris, earth had sifted in, in the course of many centuries, and here and there things had inadvertently fallen in: a coin, a Roman dish, and some bones, at a depth of 4.50 m. beneath the euthynteria; roof-tile fragments, Hellenistic pottery and, again, bones at a depth of 7 m. below the same level.

²⁵ To the south of this southern preserved end along the riverbed and near its level, we found some blocks of the Arsinoeion superstructure in fallen position. Against the southern end of the retaining wall leans a huge concrete fragment, having fallen against it from the other side. It is part of a left-bank retaining wall along the river, of which other parts are preserved further to the north and south, that supported a high terrace on which the "Ruinenviereck," the "Ionic temple" and other buildings stood. See for the situation: Deville-Coquart, *Arch. Miss. Scientif.* 2 ser., IV, 1867, pp. 253 f., plan; *Samothrake*, II, pl. 1.

The prominent position of this shaft next to the entrance of the Arsinoeion suggests that it must have had a special ritual significance. Nothing indicated that it served as a "favissa" for the regular deposition of sacrificial gifts. On the other hand, the presence of a considerable quantity of bones indicates a sacrificial purpose. And these bones, invariably of sheep, happily include parts of several rams' horns—an indication that this shaft served as a bothros in which the blood of rams flowed down to the underworld. It may be recalled that in the seventh century precinct and, more precisely, in its near by southern part, we had previously found a beehive-shaped bothros that may well have continued in use until the Arsinoeion was built.²⁶ It is, therefore, probable that this shaft near the entrance of the Arsinoeion supplanted that old bothros, as an altar inside its northern periphery supplanted an earlier altar in its own region.²⁷ All this further elaborates the character of the Arsinoeion as a thymele.

This deep Samothracian bothros-shaft has a striking and only slightly earlier parallel at Eleusis.²⁸ There, three almost identical shafts, one in the center, two near the corners and thus flanking the two doors, were discovered attached to the deep foundation of the Philonian porch of the Telesterion. These shafts, hitherto enigmatic, may now be explained as bothroi, too.

The bones found in the new bothros in Samothrace provide a bit of sacrificial culinary lore for they include a fragment that was cut at the feast in order to extract the marrow. One may recall the gusto with which the Cyclops eats the marrow of Odysseus' companions (*Od.* IX, 293) and the fact that Prince Astyanax is fed sheep marrow by his dear father (*Il.* XXII, 500) as well as the fact that witches used marrow as an ingredient of love potions (*Hor. Epod.*, V, 37). If the blood of the rams was spilled into the pit, the preparing of the sacrificial meal must have taken place near by. It seems possible that a rectangular foundation built contemporaneously with the Arsinoeion and the bothros-shaft at a very slight distance to the east of the latter and at the periphery of the former, supported an altar serving this purpose. This foundation (Pls. 1 f, 5a) measures 1.50 x 1.75 m. On its eastern side, it butts against the large rectangular foundation (C) of a monument excavated by the Austrians,²⁹ who indicated the preservation, then, of a lower marble moulding, of which we found only broken fragments, and which appears in their restoration as the base of a statue. This base or altar, also contemporary with the Arsinoeion, virtually made it impossible to enter the area between the Arsinoeion and the protective terrace walls behind it from this side, just as, on the other side, the new Sacristy was squeezed into the

²⁶ *Hesperia*, XIX, 1950, pp. 11 ff., figs. 1, 14, 16, 21, 22.

²⁷ *Ibid.*, p. 13.

²⁸ See F. Noack, *Eleusis*, Berlin, 1927, p. 118, pls. 3, 39a, fig. 52. In Eleusis, the tradition of such shafts seems to go farther back, inasmuch as a similar structure is attached to the preserved corner of the projected portico around Iktinos' Telesterion.

²⁹ Monument C, *Samothrake*, I, p. 85, fig. 35, pl. 56.

narrow space between the Arsinoeion and the Anaktoron and butted against the rotunda. Here, as towards the riverbed, the Arsinoeion builders supplanted the archaic retaining wall by concrete walls posing their new wall to the southeast of the Arsinoeion on the lower courses of the earlier polygonal structure.⁸⁰

Apart from the new elements of the Arsinoeion superstructure that have already been mentioned, we put together two handsome pieces of the upper parapet with bukrania and patera decoration which had been found previously (Pl. 7a), and allow one to visualize that fine element.⁸¹ Many other well preserved pieces were uncovered.

We also found several new fragments of the dedicatory inscription of Queen Arsinoe.⁸² It ran over six blocks, the second of which was seen early in the nineteenth century but had disappeared by the time of the Austrian excavations. The fifth still stands on the foundation of the Arsinoeion and we fitted onto it the upper part of the letters AI of ΠΤΟΛΕΜΑΙΟΥ which had been broken off since that time and were now rediscovered in 1949. Two other fragments, most of an A and part of an A or Λ belong to some part or parts of the first four blocks. As Mr. Kallipolitis recognized, another preserves part of the EY of EYXHN on the fourth block. Still another, containing the right vertical and the horizontal bar of H followed by P, comes from the left joint of block six. Though none of the new fragments definitely ascertains the husband's name as Lysimachos instead of Ptolemy, the last two pieces strikingly confirm the correctness of the ingenious reconstruction proposed by Wilamowitz and Conze.⁸³

With the erection of the Arsinoeion, the northern region received its final monumental appearance, an appearance that lasted with but minor modifications and restorations until the end of the cult in the fourth century after Christ. Apart from the altars and other monuments which may have surrounded the southern periphery of the rotunda, one may assume that, in due time, other monuments were erected to the south of it. We found among the fallen debris to the southwest of the Arsinoeion, for instance, the upper block of the marble base of a life-sized bronze statue from the Roman period which showed on its surface the indications of one foot planted on the ground, the other being raised, and a third hole for the lower end of a sceptre or spear: thus the base of a nude statue of a god, emperor or, possibly, a Dioskouros (Pl. 2b).

The cult, as previously ascertained, still flourished at the time of Constantine the Great and as late as that period a rebuilding of the Sacristy and the adjoining section of the terrace wall to its south took place.⁸⁴ In the final excavation of that corner in 1949, we found traces of a cooking place for the workmen engaged in this endeavor

⁸⁰ *A.J.A.*, XLIV, 1940, p. 342, fig. 20; *Hesperia*, XIX, 1950, p. 4.

⁸¹ Compare *Samothrake*, I, pl. 61; *Archaeology*, II, 1949, p. 40.

⁸² *I.G.*, XII, 8, no. 277 with bibliography.

⁸³ *Samothrake*, II, p. 111, fig. 34.

⁸⁴ *A.J.A.*, XLIV, 1940, pp. 342, 348, figs. 21, 23, 26.

and were able to restore a quite handsome, grey cooking pot from that period (Pl. 6c).³⁵

But soon afterward the destruction of the Sanctuary began. Neglect caused the earth of the slopes to the south of the Arsinoeion to be washed away by rain. Then lime burners began their devastating work. They built a huge limekiln, presumably around 400 A.D., digging into the ancient earth fills to the south of the Arsinoeion and posing the floor of the kiln on the natural soil slightly above the level of the riverbed, using as part of the wall the precipitous rocky cliff in the background of the glade. This kiln of about 5 m. diameter must have devoured a prodigious amount of spoils from ruined buildings and monuments. One of the fragments of the Arsinoeion's inscription was extracted half-burnt and pulverized from its debris, together with hardly recognizable fragments of what once had been sculpture. In a secondary phase, the floor of the kiln was raised about 1.50 m. to a level 3.50 m. beneath the euthynteria of the Arsinoeion. While this second limekiln was working, undoubtedly for the glory of God and the many small Early Christian churches that grew up, the pagan gods seem to have taken revenge. The ruins of the antique buildings finally collapsed in a great earthquake, probably in the mid sixth century.³⁶ In this collapse, large parts of the superstructure of the Arsinoeion fell upon the washed away hillside to its southwest and the main area of the limekiln itself while, on the opposite side, stones from the central terrace and of a building which stood on it crashed down into the southern and southwestern periphery of the kiln. Later, however, in the Byzantine Middle Ages, as potsherds indicate, the lime burners returned to the same spot and erected a new kiln of slightly smaller dimensions (4 m. diameter) over the three-foot high accumulation of fallen blocks. Part of the edge of that kiln emerged on the ground surface at the beginning of our work while this Byzantine kiln had been observed by the Austrian excavators.³⁷ In its vicinity we found an accumulation of material ready for final destruction yet abandoned, including fragments of sculpture, sometimes brought from as far off as the New Temple.

The excavation of these three successive limekilns of the Early Christian and Byzantine era, which continued almost throughout the entire campaign of 1949, was a sickening affair. What precious works of ancient art and valuable documents of the history of ancient religion we have dug away during those long weeks in the form of pulverized sugary marble dust, nobody can venture to say.

In the course of our work to the south of the Arsinoeion, we extended the excavation to the area in front of the central terrace of the Sanctuary, between its northwestern face and the riverbed (Pl. 3a). This terrace, halfway between the Arsinoeion

³⁵ Acc. No. 49.606. Ht.: 0.275 m.

³⁶ See G. Downey, *Hesperia*, XIX, 1950, pp. 21 f.

³⁷ *Samothrake*, I, pl. 1; II, pl. 1.

and the so-called New Temple, had always emerged from a wilderness of debris and overgrowth, its western corner rising over the riverbed.³⁸ On it, the Austrian excavators³⁹ uncovered two square sacrificial "bothroi," more likely hearths, *escharae*, under a marble floor. They included these hearths in their reconstruction of what they believed to be the earliest structure of the Sanctuary, an "Old Temple" of the archaic period which, they assumed, had been renewed in marble, in the fourth century B.C. In their monumental publication, they restored this renewed temple as a marble building with solid walls to which they attributed ashlar blocks bearing Hellenistic inscriptions of the *Theoroi*,⁴⁰ the ambassadors to the great festival, though none of these blocks had been found here. One is a Doric architrave⁴¹ on which they restored an Ionic frieze of archaistic style, two slabs of which had been taken to Paris⁴² after being extracted from a medieval tower in the city where they had been seen by Cyriacus of Ancona in the fifteenth century. The Austrians were justified in attributing this frieze to a building on the central terrace by the discovery of some small fragments in this region and, as we shall see, this one of their many conjectures was right. But they restored the roof of their "temple" with a sima decorated with acanthus scrolls and lions' heads—while actually a number of sima blocks of a different type are still lying on top of the terrace. This ghost building, the "Old Temple" of Samothrace, has haunted archaeological literature for the last seventy-five years. We can lay this ghost now by flatly stating that from the evidence available even before complete excavation of the area, a quite different building stood on that terrace.

We excavated the entire region in front of the central terrace. At the beginning of our work only the upper part of the western corner of that terrace wall and a connecting section of its northwestern face, built of huge polygonal grey porphyry blocks and about 5 m. long was visible. We uncovered the entire wall as far as it is still upright (Pl. 3a). It forms a straight line⁴³ and though most of the upper part of the wall is destroyed, its course is preserved without break for a length of 15.50 m. This wall is posed on bedrock which here descends towards the riverbed roughly from east to west, and, near its western corner, the terrace is preserved to a height

II

of 3.20 m. (Pl. 7b). An inscription ΠΠ, presumably a mason's mark, is incised in large letters on the northeast face of the western corner (Pl. 4f). Though the fill behind the terrace wall is as yet unexplored, potsherds from its joints indicate a date not later than the fourth century B.C.

³⁸ See *Samothrake*, II, pl. 3.


³⁹ See *Ibid.*, II, pp. 13 ff., 21 ff., pls. 2 ff., 76.

⁴⁰ *I.G.*, XII, 8, Nos. 160 ff.

⁴¹ *Ibid.*, No. 176.

⁴² See below, pp. 16-8, Pl. 8b.

⁴³ In this respect the older plan by Deville and Coquart, *op. cit.*, is more reliable than the plan in *Samothrake*, II, pls. 1, 2.

We uncovered extensive remnants of a low "monument terrace" along the outer face of the central terrace (Pl. 7b). Posed on bedrock, and ascending in stepped sections from southwest to northeast, it may be a later addition. It is built of big rectangular limestone blocks and has on the whole a slightly projecting foundation course 0.24 m. high, and base blocks of various lengths but of an average height of 0.30-0.37 m. The width of this terrace was at least 0.47 m. Some of the base blocks have  shaped clamp and dowel holes, showing that they carried monuments. At a distance of *ca.* 8 m. from the western corner, a foundation of red local porphyry—used in the Hellenistic period in Samothrace—⁴⁴ 1.35 m. wide projected to at least 2.35 m. from the terrace. It may have supported a rider monument or a seated figure. That this low terrace in front of the high terrace wall carried a series of monuments and accompanied an ascending road that led from the western corner of the big wall up the hill towards its northern end is evident. Masses of small pieces of base mouldings were found in the accumulation of debris in front of the terrace as well as some insignificant fragments of marble sculpture. But alas, not a scrap of an inscription giving evidence of the character of individual monuments was preserved.

To the sacred road which passed through this area may belong scattered fragments (none *in situ*) of a rough mosaic pavement in which sizable pebbles and pieces of marble were imbedded in cement.

The large triangular section of rocky ground descending toward the riverbed and the monument terrace in front of the terrace wall were covered with fallen debris from the upper part of the terrace wall, blocks from the monument terrace, and remnants of the monuments which it supported (Pl. 3a).

But intermingled with this debris was a huge quantity of building blocks which had fallen down from the terrace and belong to the structure or structures that stood on it. Most of these building blocks, approximately one hundred fragments, belong to one and the same building as their dimensions, material, and technical details show. Samples of the euthynteria, the steps, orthostates, columns, architraves, ceiling beams and coffers, supports of a pedimental roof and sima-cornice blocks (several blocks of this type still lie on top of the terrace) were found in dense accumulation precisely as they had fallen down in the final collapse. The exact position, function, and plan of the building can only be conjectured at this point and conclusive evidence may be hoped for in the future.

However, this much may already be said. The building was a small graceful structure of Thasian marble. It had projecting lateral wings or a central projection between lateral recesses. On the steps there stood monolithic Ionic columns, one of

⁴⁴ This material, heretofore wrongly called "red limestone," has now been identified as porphyry. It exists as natural rock in the Sanctuary in the region of the southern part of the New Temple and in front of the central terrace. Its most conspicuous use is in the dais separating the northern section of the Anaktoron from the main hall, as it was rebuilt in the Hellenistic period (*A.J.A.*, XLIII, 1939, p. 138, fig. 5; *Archaeology*, I, 1948, p. 47; *Hesperia*, XIX, 1950, p. 2, note 4.).

which is almost entirely preserved (Pl. 2a, Ht. 3.47 m.). We were lucky enough to find three fragments of the capital, though none in our excavation. Two, previously in the collection of the church in Chora, are upper parts of an Ionic capital.⁴⁵ They fit onto a singular drum or necking discovered by Mr. Kallipolitis in the garden of a house in Chora,⁴⁶ and this drum, in turn, fits the upper diameter of our column (Pl. 7c and d).⁴⁷

This unique capital, derived from an old Greek type that found its classical crystallization on the Erechtheion, evidently belongs to a variety quite popular in the fourth century B.C. Time and again, we see Ionic capitals often with very tall neckings decorated with palmette motives on buildings represented on South Italian vases of that period.⁴⁸ The lateral decoration of the Ionic volutes carries on a tradition of the fourth century "Ionic Renaissance" in Asia Minor as it, in turn, is a forerunner of the stylistically quite different elaboration of the motive on the Ionic capitals of the Ptolemaion in Samothrace dated round the middle of the third century.⁴⁹ The spirited grace of the ornamental details of the new capital, including the palmettes with their lower lateral leaves turned inward, suggests a date in the last third of the fourth century, a date indicated as well by other features of the building.

⁴⁵ Acc. No. 49.414 A-B, Ht.: 0.152 m.; Lower diam.: 0.46 m.

⁴⁶ Diam.: 0.46 m.; lower diam.: 0.44 m.; Ht.: 0.258 m.

⁴⁷ Lower diam.: 0.56 m.; 24 flutings.

⁴⁸ Examples: A. D. Trendall, *Paestan Pottery*, London, 1936, pl. Ia (L. Séchan, *La tragédie grecque au rapport avec la céramique*, Paris, 1926, pl. I, 1; C.V.A. Siracusa IV E, pl. 2, 1; *Rev. Arch.*, XXXIII, 1931, p. 236, fig. 1; between 400 and 350 B.C.); *Ibid.*, pl. Iib (C.V.A. Siracusa IV E, pl. 9, 1; *Rev. Arch.*, XXXIII, 1931, p. 236, fig. 2); *Ibid.*, pl. VII (Séchan, *op. cit.*, p. 525, fig. 155); C.V.A. Siracusa IV E, pl. 12, 3; Séchan, *op. cit.*, p. 96, fig. 31; *Rev. Arch.*, XXXIII, 1931, p. 243, fig. 11. Tall neckings without indication of the type of decoration are common on Ionic columns on South Italian vases. The capital of the Erechtheion with its quite different pattern is imitated in some examples in Delphi, one of which was previously dated in the fourth century and attributed to the interior order of the Temple of Apollo (*Fouilles de Delphes*, II, Top. et arch., Terrace des Temples, pl. 8, pp. 42 f.). It was assigned by Replat, *B.C.H.*, XLVI, 1922, pp. 435 ff. to one of the two column monuments generally dated in the second half of the third century B.C. A similar capital of Erechtheion type is commonly attributed to another of these monuments: H. Pomtow, *Beiträge zur Topographie von Delphi*, Berlin, 1888, pl. 7, figs. 72, 73; F. de La Coste-Messalière, *Delphes*, Paris, 1943, pls. 54, 106, 194, p. 321. Bosanquet, *B.C.H.*, 1911, p. 480; F. Schober, *R.E.*, Suppl. 5, pp. 95 ff. points out that the capitals used in this instance belong to two different monuments and that the marble of the monument to which they are attributed is of a still different variety. On the other hand, the only monument of this type where the capitals are preserved (E. Bourguet, *Ruines de Delphes*, Paris, 1914, p. 165) has a different type of column altogether. Under the circumstances, there is no reason to attribute any of the Delphian capitals to a period earlier than the late second century B.C. They are classicistic revivalist imitations. For our new type, I know of no analogy except two undated and unpublished pieces, one from the region of Salonika, in the Louvre (under the stairway), one of unknown provenance in a storeroom of the British Museum. It should be noted that the capital of the Temple of Zeus at Priene (*Priene*, Berlin, 1904, p. 141), the upper part of which is similar to ours, also ends below the torus in the same fashion as our upper piece and may have been posed on a necking.

⁴⁹ *Samothrake*, II, pls. 23 ff.

To our building, too, belonged ceiling coffers decorated with busts of divinities. Fragments of three such coffers have been found previously in this region and attributed to the "New" or the "Old Temple."⁵⁰ We discovered the fragment of a fourth coffer (Pl. 6d)⁵¹ showing the neck and long hair of a profile head, evidently of a woman facing toward right, among the debris of the new building. Inasmuch as the other three pieces show a woman, a bearded god, and a youth, the theory already advanced that Axieros, Axiokersos, Axiokersa and Kadmilos were represented on this ceiling gains weight. It is possible, however, that there were once more than four and that the young man's head may have belonged to one of the Kabeiroi-Dioskouroi.⁵²

Intermingled with the other debris of this new building and beyond any doubt belonging to it, we found extensive parts of the marble frieze of dancing girls in archaistic style, thus far known chiefly from the two slabs in the Louvre (Pl. 8b).⁵³ The most important is one almost completely preserved block⁵⁴ (Pls. 8a, 9a, 10) broken into two connecting pieces which were found on two successive days on the very same spot, in front of the eastern part of the terrace. While the Louvre piece (Pl. 8b) is badly weathered owing to its long exposure, our block is magnificently preserved and has all the sharpness and delicacy of a masterpiece of late fourth century Greek sculpture. The block shows eleven dancing maidens and part of a twelfth preceding and following a female lyre player. Holding their hands in old fashioned *ἐπὶ καρπῶ* they turn their polos-crowned heads alternately backward and forward and, as they do, the interval from figure to figure changes slightly, being alternately extended or contracted. On our block, the figures move from left to right, while on the Louvre fragment, where a tympanum player occupies the center and a flute player also appears, the figures move in the opposite direction. Apart from several other smaller fragments, we have also found a large piece of another block⁵⁵ on which the direction of the dance is the same as on the Louvre slabs (Pls. 9b, 14c).

⁵⁰ *Ibid.*, I, p. 28, pl. 51; II, p. 14, fig. 3; A. Schober, *Oest. Jahresh.*, XXIX, 1935, p. 14; Chapouthier, *op. cit.*, Paris, 1936, pp. 177 ff., fig. 18.

⁵¹ Acc. No. 49.355. Pres. W.: 0.16 m.; Ht.: 0.105 m.

⁵² Our new fragment obviously does not belong to any of the other pieces. It is also not impossible that the fragment, *Samothrake*, II, p. 14, fig. 3, did not belong to the one brought by Chapouthier to Athens. In that case, we already have pieces of five coffers, three with women, two with men. For divine busts on ceilings from the fourth century B.C. on, see: *Art Bull.*, XXVII, 1943, p. 4.

⁵³ *Hesperia*, XII, 1943, pp. 115 f. with bibliography. The fragments in the Louvre have hitherto been reproduced in the wrong sequence. They fit together as they are shown in the new photograph, Pl. 8b, which we owe to the courtesy of Jean Charbonneaux.

⁵⁴ Pres. L.: 1.69 m.; Ht.: 0.35 m.; Th.: 0.35 m. (below 0.32 m.). Anathyrosis at left end. Broken at right.

⁵⁵ Restored from two cracked fragments found within a small distance of each other in the same region; anathyrosis partly preserved at right side; broken at left. Pres. length with part of four figures: 0.58 m.; Ht.: 0.34 m.; Th.: 0.375 m.

It is evident that the two friezes moved towards each other from two sides. The lack of the lewis holes invariably found on our building-blocks wherever they had to be lifted into a high position indicates that the frieze was not so placed and most certainly was not part of the entablature. We assume that the friezes of dancing maidens were placed over the orthostates and converged towards the door on the interior of our building, according to an artistic idea well established in this region, as the late archaic Nymph Monument from Thasos shows.

The monument, of which large sections are now so well preserved, is the most extensive Greek representation of archaistic, retrospective art.⁵⁶ It marks the climax of a sideline of Greek art that developed slowly by means of individual figures rather than in comprehensive compositions during the fourth century on the background of experiments in the late fifth. Later than the graceful archaistic figure on the side of a well known base from Epidauros, though still closely related to it,⁵⁷ the rendering of archaic conventions and the relationship of the draperies to the slim bodies on the Samothracian frieze find their most explicit analogy in figures of the Palladion on Panathenaic vases of the last third of the fourth century and on coins struck by Ptolemy I when he was governor of Egypt.⁵⁸ This stylistic connection confirms the date otherwise indicated by the technical and stylistic character of the building to which the frieze belongs. The approach to archaism in the fourth century, as exhibited in these reliefs, is quite different from the looser experiments of the Hellenistic age and the heavy rigidity of the Roman. It is easy, spirited and, at the same time, elastically decorative. The archaic conventions of pleated and pointed draperies with swallow-tailed excrescences and zigzag patterns are integrated with ease, and with

We found in addition a fragment with two almost destroyed figures facing right; another with a broken part of one figure towards left; another with a head of a figure turned towards left; a fragment of another head; two more small fragments of drapery and of a moulding.

Fragments previously discovered include a block with badly destroyed fragments of five figures (0.87 m. long, *Samothrake*, II, p. 13), another one with three figures (*ibid.*) and three smaller pieces (*ibid.*; Deville-Coquart, *op. cit.*, p. 276). It may be assumed that these fragments, all discovered on or near the terrace, as far as then recognizable showed movement towards the left, inasmuch as the earlier excavators do not mention a direction different from the Louvre slabs. To all these fragments we should now add a small piece with figures moving towards the right, discovered by us on the surface near the altar in the Arsinoeion in 1939, in correction of a former statement (*A.J.A.*, XLIV, 1940, p. 339). We were then mistaken owing to a slight irregularity and assumed that this fragment belonged to a round altar. Dimensions and details are identical with the newly found pieces.

⁵⁶ See E. Schmidt, *Archaistische Kunst in Griechenland und Rom*, Munich, 1922, especially pp. 39 ff. for the Louvre slabs.

⁵⁷ *Ibid.*, pl. 16, fig. 2.

⁵⁸ Mrs. Bober refers especially to the amphoras with the name of the archons, Nikokrates and Theophrastos 1 or 2, *Monumenti dell' Ist.*, X, pls. 47C, 48A, and to the coins of Ptolemy: *Brit. Mus., Cat. of Greek Coins*, XIX, pl. 1, figs. 2-5, which are somewhat looser, and proposes a date about 320 B.C., in harmony with other features of the building.

naturalistic, if somewhat preciously slim, rendering of the bodies and heads, in a spirited and almost naive meeting of a remote and a new world. The decorative, though not at all schematized, repetitive rhythm falls in with patterned details borrowed from the archaic past. The frieze belongs to a period in which, for several generations to come, the great tradition of human and narrative representation in architectural reliefs disappeared⁵⁹ and was supplanted by the decorative repetition of repeated symbolic motives such as bukrania, garlands, paterae and rosettes. It thus represents a transitional phase and happily unites the human element with both decorative rhythm and symbolical reference to religious rites.

A slightly earlier frieze of Erotes bearing sacrificial implements which graced the precinct wall of the Sanctuary of Aphrodite and Eros at Athens offers a formal analogy in both these respects.⁶⁰ In this frieze, the institution of a procession actually taking place in the cult is alluded to at the entrance of Aphrodite's precinct by the representation of her winged acolytes. As archaistic style always refers to old divine or legendary origins, the archaistic style of our dancers indicates that reference is made to the aboriginal institution of choral dances of maidens in the Samothracian cult. Certainly such dances took place on the central terrace of the Sanctuary and it may be that they were connected with the legend of the sacred marriage of Kadmos and Harmonia,⁶¹ the dramatic performance of which is documented in the festivals at Samothrace.

These friezes, then, would have been an appropriate decoration of either a monumental altar or, more likely, a propylon leading to a sacred precinct in which such rites were practiced. Such a hypothesis, however, remains purely conjectural until the anticipated excavation of the entire terrace has been accomplished. A clarification of the relationship of this building to the ruins recorded by our Austrian predecessors, specifically to the existence of sacrificial places and of a succeeding marble floor⁶² will, we hope, result from the excavation of this area.

⁵⁹ No datable pediments or friezes are known between the time of Alexander the Great and the mid-second century B.C. if Hermogenes' revivalism, as now generally assumed, belongs to the second half of that century. For the "New Temple" in Samothrace see *Hesperia*, XIX, 1950, pp. 4 ff. and below, p. 38 note 85. The Pergamon altar, with its unorthodox use of architectural relief, prepares the revival as our equally unorthodox frieze stands at the end of the classical tradition.

⁶⁰ Mrs. Lehmann first called attention to this striking analogy. See O. Broneer, *Hesperia*, IV, 1935, pp. 143 f.

⁶¹ It should be noted that cithara, flute and tympanum occur among the instruments of the preserved parts of the frieze while others may have been represented in missing sections. In Diodorus' extensive description of Harmonia's wedding in Samothrace, Elektra institutes the mystery rites on this occasion with cymbals and tympana, while Apollo plays the cithara and the Muses the flutes (V, 48). Tympana and flutes, with cymbals or crotala, are mentioned elsewhere as characteristic of the rites (Strabo, X, 3, 7 (C 466) and 15 (C 470)). In Diodorus, Hermes is also mentioned as playing the lyre at the wedding and the passage in Nonnus, *Dionysiaca*, III, 234 ff. mentioning the lyre along with flutes and cymbals, is probably derived from this source.

⁶² *Samothrake*, II, pp. 13 ff., 22 ff., pls. 4-7.

We hope this in spite of the fact that certainly much has been destroyed since the Austrian excavation, that some irregular and more recent "excavation" holes are now visible, and that, in addition, the post-antique limekilns near by have surely wrought destruction over long centuries. Nature, too, has done her share. In front of the northern part of the terrace and descending from east to west, we found river sand containing debris, confirming the existence here of a water course in post-antique times. This water course had been observed in the, for its time, excellent plan by Deville and Coquart⁶³ who, therefore, called the central terrace an island. It is, however, of post-antique origin and it ran over the old foundations and debris of classical buildings. It seems to be the continuation of a similar riverbed filled with debris that we have previously⁶⁴ located adjacent to the northeastern corner of the "New Temple" and it appears that this water course contributed greatly to the destruction of the eastern and northern part of the central terrace.

Our second major objective during the campaign of 1949 was the continuation of the systematic excavation of the great building in the south of the Sanctuary known since the termination of the Austrian excavations as the "New Temple."⁶⁵ This name was given to it by our predecessors under the assumption that an "Old Temple" of archaic origin continued to stand on the central terrace. Inasmuch as that was evidently not the case and inasmuch as our excavation has now made it clear that the Hellenistic marble building was preceded on its own site by forerunners going back to the archaic period, the term "New Temple" becomes meaningless, and we retain it for the time being only for the sake of convenience. Although we do this in order to avoid additional confusion, we do it with some hesitation. It seems doubtful whether a building which had no base for cult images in its interior but a complicated installation for liturgical performances and sacrifices should be called a temple at all.

During the campaign of 1949, we finished the excavation of this impressive building by uncovering its southern part and its periphery (Pls. 11, 12, 13a). The marble and limestone blocks of its superstructure which had accumulated over it have been temporarily removed to its surroundings so that an accurate plan can be made before the blocks are replaced in orderly fashion on the foundation. The number of marble blocks thus removed has increased to 340.

The foundation of the temple, with its marble euthynteria preserved entirely on the short southern side, and to a length of 12.00 m. and 14.60 m. from the corners on its western and eastern sides, is now entirely exposed. It is even more extensively preserved than appeared in the Austrian plan.⁶⁶ At the rear, only the central part

⁶³ *Op. cit.*, above note 55.

⁶⁴ *A.J.A.*, XLIII, 1939, pp. 140 f., fig. 2.

⁶⁵ *Hesperia*, XIX, 1950, pp. 4 ff., figs. 6-12.

⁶⁶ *Samothrake*, I, pl. 11.

of the limestone wall of the apse emerges two courses over the inner and five courses over the outer level. Within the apse, we saw the picture of willful destruction by local vandals which had taken place between the first and second Austrian campaigns and which led Professor Conze providentially to rebury this part of the building.⁶⁷ We found some of the marble blocks originally framing the bothros fallen into it and though several stones appearing in the Austrian plan, section,⁶⁸ and photographs have disappeared, we were able to replace a large part of the marble frame of the bothros.

We also excavated the area to the immediate south of the temple between it and a slightly oblique terrace wall⁶⁹ of the porphyry variety also used for the central terrace.⁷⁰ We made additional soundings in various parts of the building to clarify chronological problems and we replaced some of the interior stone foundation blocks once serving as supports for lateral benches, strengthened and supported others. The main results of this work may be reported in historical order as follows.

In the interior of the apse, purple rock was found descending steeply from north to south. Posed directly on it, a segment of a curved polygonal wall (Pl. 12c) was found at a distance of 0.67 m. inside the apse of the marble temple.⁷¹ It is part of an earlier segmental apse which evidently framed a smaller bothros in the first building on this spot. Though no evidence for dating this earliest structure was obtainable, the aspect of the wall is distinctly archaic and we may assume that it belongs to the Anaktoron period of the Sanctuary around 500 B.C. It thus seems that an apsidal building of considerably smaller dimensions than the Hellenistic temple was built here at the time when the initiation into the first degree of the mysteries was provided for by the building of the Anaktoron, and that this early building, too, had a bothros in an apse at its southern end. It may be recalled that the "nave" of the Hellenistic building includes two sacrificial hearths of a type otherwise known only from the archaic age.⁷² Now this strange archaism may be explained by the assumption that

⁶⁷ *Ibid.*, II, pl. 13.

⁶⁸ *Ibid.*, I, pl. 11; pl. 14, fig. 1; pl. 17. Nothing was left of the vertical stones on the western side of the bothros (*ibid.*, pl. 14, fig. 1; pls. 19-21), and a lower vertical stone in the center rear (pl. 11) visible in the photograph, pl. 19, preserved up to the level of the pouring stone, had disappeared in pl. 20 and fig. 1 on pl. 14, evidently already removed by the excavators.

⁶⁹ In the plans, *Ibid.*, II, pl. 1 and p. 29, fig. 6, this wall appears parallel to the "New Temple." In reality, its distance diminishes from 2.70 m. at the southeastern to 2.50 m. at the southwestern corner of the building. It continues westward and its oblique course is in harmony with the shorter extension of building D situated immediately to the west. It, therefore, would seem that the Hellenistic "New Temple" and this building were part of one building program. For building D, see below p. 25 and notes 76, 96.

⁷⁰ Above, p. 13 and Pls. 3a, 7b.

⁷¹ This wall and its successor were already excavated by the Austrians who indicate their existence, *Samothrake*, I, pls. 11, 17 without comment. Inasmuch as both walls are on rock, their previous excavation has destroyed whatever stratigraphic evidence of their date might originally have been obtainable.

⁷² *Hesperia*, XIX, 1950, pp. 5 f., fig. 12.

these Hellenistic *escharae*, too, continued a ritual installation inherited on this very spot from the archaic period.

The archaic apsidal building was succeeded by a slightly larger structure built of carefully dressed limestone slabs the lowest course of which is also posed on the rock a slight distance to the south of the archaic apse and in a curve concentric with it (Pl. 12c). This lowest course of the second apsidal building is level with the marble euthynteria of its Hellenistic successor and the building may have been but slightly smaller than it. These limestone slabs, the southern periphery of which is now covered by the lowest course of the Hellenistic apse, supported a wall *ca.* 2 feet thick. Again, the date of this renewed structure,⁷³ probably sometime in the fifth or fourth centuries, can no longer be determined. But inasmuch as we have evidence of restorations and changes in the northern part of the Sanctuary at the end of the fifth century,⁷⁴ a date around 400 may be assumed for the enlarged second apsidal building.

In any case, the second apsidal building preceded the third, the great Doric marble temple. With the exception of the broader pronaos,⁷⁵ the preserved foundation of this third building, its apse, as well as its interior installation with a broad nave separated by parapets from lateral aisles, its provision of benches for these aisles and of two *escharae* in the nave, were all built around the middle of the third century B.C.⁷⁶ The

⁷³ See Note 71.

⁷⁴ Above, p. 8.

⁷⁵ *Hesperia*, XIX, 1950, p. 5, figs. 9-11.

⁷⁶ A. Salač, *B.C.H.*, LXX, 1946, pp. 537 ff. already has arrived at the conclusion that the original temple dates from the middle of the third century B.C. and that only the pronaos was renewed a century later. However his reason for suggesting such a development was faulty. Inasmuch as A. Schober had shown that the inscription found by Salač (*B.C.H.*, XLIX, 1925, pp. 245 ff.) could not belong to the present Temple façade and had dated the entire temple in the second century B.C. (*Oest. Jahresh.*, XXIX, 1935, pp. 1 ff.), Salač argued that the inscription as restored by him should belong to an earlier third century, dedicatory inscription by Ptolemy II belonging to the same building. While the date of the temple is now established as being of that time, the inscription—at least as restored by Salač—cannot belong to it inasmuch as in the original structure the façade was considerably narrower than the present second century porch (*Hesperia*, XIX, 1950, p. 5) and would not have allowed space for the text. Schober has suggested that the inscription should belong to building D to the west of the temple. Inasmuch as the location in which the block was found and now lies as well as the dimensions of that building agree with such an attribution, and inasmuch as building D seems to be contemporary with the temple (see above, note 69) this possibility certainly exists.

We are somewhat mystified by several statements found in Professor Salač's paper. He reports that building D was completely excavated by him. The state of the ruin exhibits ditches following the lines of the walls only. He furthermore indicates that building D could not have had an elaborate marble superstructure inasmuch as its walls, built directly on the rock have, as he says, neither clamps nor dowels. Actually the well preserved fine poros euthynteria of D, uncovered by us on its eastern side about level with that of the New Temple, is 0.245 m. high and rests on a foundation course posed on rock. It may also be mentioned even now that what appears to be a good deal of its Doric marble superstructure including a frieze higher than that of the New Temple, is preserved. Such pieces had already been found by the Austrians and connected with D: *Samothrake*, II, p. 10.

evidence for this date was obtained by a full excavaton of the space to the south of the building, between it and the southern terrace wall which we exposed insofar as it faced the temple (Pl. 12a and b) and by a number of tests in the interior. The character of the potsherds found in both regions indicates a date later than that of the Arsinoeion fill, but these potsherds still include a small proportion of black-glazed pottery.

This building, with its limestone foundation with marble euthynteria, had a compact stone fill in the interior. In the aisles, the limestone blocks supporting the lateral benches were included in this stone fill which otherwise supported throughout the building a substructure of limestone slabs⁷⁷ on which, in turn, the stuccoed limestone parapets and a now entirely destroyed marble floor were posed.

The careful observations made by Mr. Fraser have revealed two other important facts concerning the third century building. First of all, its apse forms a segment of a circle with a diameter somewhat smaller than the inner width of the cella. In other words, the apse of the Hellenistic temple was not simply a segmental curved wall at the end of the cella,⁷⁸ but a real apse recessed from the inner angles of the rectangular interior. We must assume that it was covered by a separate ceiling, most probably a wooden half-dome. The apse of the third century temple in Samothrace which remained basically unchanged in the later phases of the building is, thus, the first and only pre-Roman representative of a genuine large scale apse in the history of architecture, the next instances occurring in Roman Republican architecture of the first century B.C., whence the great tradition of longitudinal buildings having apses at the rear continues to culminate in Christian architecture. Given the conspicuous place which Samothrace occupied in the late Roman Republic and its particular popularity in Roman society, a popularity equally documented by literary sources and inscriptions, the Hellenistic temple in Samothrace may well have been of decisive influence in this development.⁷⁹

On the other hand, as we have seen, the third century apse succeeds two earlier apsidal structures and its Hellenistic monumentalization of this concept was evidently

It is a pity that apart from a few inscriptions and short general notes (for building D see *B.C.H.*, XLVII, 1923, p. 540) nothing was published at the time of the excavations or in the quarter of a century after their officially announced termination. A number of general references are found in Chapouthier, *op. cit.*, pp. 153 ff.

⁷⁷ The plan, *Samothrake*, I, pl. 11, indicates that at the time of the Austrian excavations the limestone underpavement may have been better preserved in the southern part of the cella between the bothros and the parapets where most of it is now destroyed but its previous existence is recognizable. Yet inasmuch as the excavators did not indicate the *eschara* in this area (*Hesperia*, XIX, 1950, p. 5) and, farther north, drew an earth floor between the parapets where the stone pavement is, in fact, completely preserved, one should not take details of the plan as documentation.

⁷⁸ As indicated in the reconstruction, *Samothrake*, II, p. 29, fig. 6 and later reproductions.

⁷⁹ The importance of the curvilinear rear wall of the temple was already recognized by Conze, *Samothrake*, II, p. 30, though details were not then known.

conditioned by the liturgical purpose of the apse and its bothros, a function that was traditional here. While apsidal religious buildings, an offspring of prehistoric domestic architecture, are found here and there in the archaic period in Greece,⁸⁰ these buildings were small and the type had gradually become obsolete by the classical age. In Samothrace, ritual reasons compelled its preservation and led to its monumentalization in the third century B.C. The New Temple, thus, forms an important, though not necessarily the only, link between a primitive Greek tradition and an outstanding feature of late antique and later occidental architecture.

Another interesting fact is that the euthynteria of this early Hellenistic structure, which is entirely preserved on the southern side (Pl. 12b), exhibits the use of horizontal curvature with a center emerging 0.02 m. over the corners. How much of the present collapsed superstructure, marble on the outer, limestone on the inner wall face, belongs to the mid-third century temple cannot yet be stated. It seems that much, if not all, of it was renewed around 150 B.C. when a platform was added of broader dimensions than the original building, as well as a new six-column façade and a sculptured pediment.

We have found a number of additional pieces of the sculptural decoration of this renewed building. They include handsome fragments of the sima with powerfully modeled lion's-head water-spouts (Pl. 13b)⁸¹ which drastically illustrate the change from the free subclassical modelling of the Arsinoeion (Pl. 6e)⁸² to a style at once grand and firm. Fragments of the raking sima found to the south reveal a richer decoration than hitherto assumed (Pl. 13c),⁸³ with the intervals between flowers alternately filled by buds and palmettes. A number of small fragments of the central floral akroterion⁸⁴ were also found on the southern side of the temple, some rather different, it would seem, from those rescued by the Austrians and now in Vienna.

Quite unexpected additions to the previously excavated sculptures of the northern pediment, now also in Vienna,⁸⁵ came to us from a heap of marbles assembled by the

⁸⁰ See C. Weickert, *Typen der archaischen Architektur*, Augsburg, 1929, pp. 18 f., 77, 80 ff., 125 ff. A small early archaic chapel in Delphi possibly had a real apse with lateral recesses: *Ibid.*, p. 80. The existence of an archaic apsidal building in Samothrace may now be considered to offer a quite important religious analogy to the curved wall under the temple in the Kabeirion near Thebes: *Ibid.*, pp. 81 f.; Wolters, P.-Bruns, G., *Das Kabirenheiligtum bei Theben*, Berlin, 1940, pp. 10 f., pls. 2, 3. Professor Holland calls our attention to a small fourth century apsidal building found in Colophon.

⁸¹ Acc. No. 49.453, found near the southwest corner. Pres. L.: 0.771 m.; Pres. Ht.: 0.16 m.

⁸² Acc. No. 49.145, found southwest of the Arsinoeion in fallen position. Pres. L.: 0.63 m.; Pres. Ht.: 0.256 m.

⁸³ Acc. No. 49.194-363 B, found near the southwest corner of the New Temple. Pres L.: 0.302 m. Compare the erroneous restoration, *Samothrake*, II, pl. 13.

⁸⁴ *Samothrake*, I, pls. 44 ff.

⁸⁵ For these sculptures see the brilliant article by A. Schober, *op. cit.*, note 76, which established a date in the middle of the second century B.C. both for the sculptures and the renewal of the façade

Byzantine lime burners near the kiln to the south of the Arsinoeion.⁸⁶ The most important find here was a sizable fragment of a reclining, seemingly female, and rather pudgy figure. It belongs in the left eastern corner of the pediment (Pl. 14a).⁸⁷ Another fragment is the right foot of a second female pedimental figure, the left foot and possibly the draped torso of which were found by the Austrians in front of the New Temple (Pl. 13e).⁸⁸

Various other fragments of Hellenistic sculpture were discovered in the accumulation of debris over the southern part of the building. Two fragments of the hair and drapery of a colossal female figure,⁸⁹ may be extraneous to the temple and come from some monument in the vicinity. They are carved of the same grey Rhodian marble used in the prow, but not in the figure, of the famous Victory in the Louvre.

Another interesting piece is a marble fragment of a round columnar monument with the spirited head of a snake encircling its bundled shaft. The fragmentary flaring finial above it may well have been a lamp (Pl. 14b).⁹⁰ Mr. Kallipolitis called our attention to the fact that the Austrians discovered part of the lower end of such a monument. It has similar convex flutings encircled by what appears to be the tail of a snake. These fragments, whether part of one or two such objects, strikingly resemble the monumental torches, encircled by snakes which flank the door of a round cult building—either the Arsinoeion in Samothrace or a corresponding structure in Cyzicus⁹¹—on various Samothracian stelae. One is tempted to think that candelabra in the form of torches encircled by snakes flanked the bothros in the Hellenistic New Temple.

We found several fragments of lateral bench supports with lion's paws and scroll work that may have belonged to especially elaborate seats of honor in the

previous to the evidence of our excavation (*Hesperia*, XIX, 1950, p. 5). Dorothy Burr Thompson has kindly called our attention to the rather vague discussion of the pedimental sculptures by G. Kleiner, *Tanagrafiguren*, Berlin, 1942, pp. 153 ff. which again advocates a mid-third century date, now definitely obsolete in view of the excavation results.

⁸⁶ Above, p. 12.

⁸⁷ Acc. No. 49.491. Pres. L.: 0.27 m.; Ht.: 0.26 m. If, as Schober, *op. cit.*, p. 15, suggests, a right foot, *ibid.* No. 7, fig. 8, belonged to this figure, the legs would have been crossed—which seems possible.

⁸⁸ Acc. No. 49.613 A, also from the limekiln area. Pres. L.: 0.113 m.; Ht.: 0.078 m. The counterpart in Vienna: Schober, *op. cit.*, p. 10, No. 6, fig. 7 and p. 15. Our foot has a clearly preserved sandal and this explains the "plattenförmige Unterlage" of the fragment in Vienna which obviously is but the sole of a sandal and allows for no conclusions.

⁸⁹ *Samothrake*, I, p. 12, reports the discovery of a fragment of a colossal head and hand in the New Temple.

⁹⁰ Acc. No. 49.29. Pres. Ht.: 0.163 m. Found, curiously enough, in the fill brought in to the bothros by our predecessors after its original excavation. The fragment previously discovered. *Samothrake*, I, p. 14, fig. 6, was also found in the bothros.

⁹¹ See *Hesperia*, XII, 1943, pp. 117 ff., with bibliography. See too F. Studniczka, *Oest. Jahresh.*, VI, 1903, p. 125. We may recall the marble torches dedicated in Eleusis and reused in Christian times: K. Kourouniotis, *Eleusis*, Athens, 1936, pp. 82 f.

southern section of the building near the apse. One fine and entirely preserved piece of the type, formerly in the collection of the Church in Chora, now graces the Museum near the excavation (Pl. 13d).⁹² Whether a part of a marble clipeus with a bust (Pl. 17b)⁹³ found in the southern part of the temple, belonged to its interior decoration is questionable, though such reliefs are known from Hellenistic times and, specifically, from the Club Building of the Samothracian community at Delos.⁹⁴

The most important single find from the building, however, was a fine piece of Hellenistic sculpture (Pls. 15, 16). This life-sized figure of a Victory⁹⁵ was found at a point 9 m. north of the southwestern corner of the building, after an accumulation of fallen blocks, including sima fragments, had been removed from the euthynteria and from the narrow interval between it and the eastern euthynteria of the square building situated to the west of the southern part of the Temple.⁹⁶ Three major fragments of the figure and numerous smaller connecting pieces were found together just under the surface of the euthynteria where they had been carefully buried in antiquity. The figure lay parallel to the Temple and face down on the bedrock which here emerges beneath the lower face of the single low foundation course beneath the euthynteria. It is evident that it had been damaged in antiquity and buried here near the place where it had fallen.

The dimensions of the figure, its generic type, its hollowed-out back, its provision for a vertical support hooked into a hole to keep it in position, and certain motives such as the knob of drapery emerging from the mantle over the right hip all closely relate the new statue to a figure now in Vienna.⁹⁷ The latter was found, evidently where it had fallen down in the final collapse of the building, near the same southwestern corner to the north of which our figure had been buried in antiquity. Because of its type, dimensions, and technical details, the Vienna figure has long been recognized as the southwestern corner akroterion of the New Temple. In view of the circumstances of her discovery as well as of a considerable difference in style, we are forced to conclude that our figure must have been an earlier akroterion of the southwestern corner that had fallen down, been buried and supplanted by the figure now in Vienna.

Exhaustive discussion of the statue must await further investigation. The right arm together with the once separately attached but now missing extended left forearm, makes it probable that the Nike poured a libation from a pitcher held high in her right hand into a patera in her extended left, a type well known in ancient, if not otherwise

⁹² Acc. No. 49.412. Already correctly attributed to the New Temple, *Samothrake*, I, p. 76, with drawing, pl. 47.

⁹³ Acc. No. 49.1023. Pres. Ht.: 0.16 m. The part preserved shows the right shoulder of a draped bust framed by an ornamental edge.

⁹⁴ *Expl. Arch. de Délos*, XVI, Paris, 1935, pp. 13 ff.

⁹⁵ Pres. Ht.: 1.43 m. (plinth: 0.07 m.).

⁹⁶ Building D, see above, notes 69, 76.

⁹⁷ A. Schober, *op. cit.*, pp. 17 ff. with bibliography, pls. 2, 3.

three dimensional, representations. The figure is sandalled, posed on her left leg, and clad in a thin chiton over which an himation is draped around the lower part of the body, one end twisted curiously around the left arm. The stylistic effect is dominated by the contrast between the broad but severely and vertically pleated draperies of the lower part of the figure, the almost classical firmness of organization characteristic of the lateral views of this drapery, including the broad "Pheidian" zigzag folds on the left side, and the flickering, winding, unruly "baroque" style of the cloak around the hips and arm, as well as the tall, thin, flowery grace of the upper part of the body which shoots upward with a plant-like elasticity. This thinness of proportion as well as the style of the drapery make a date earlier than the middle of the second century B.C. impossible. These and other characteristics are in harmony with a date in that period and with the style of the contemporary pedimental figures. The very contrasts united here point to that phase of Hellenistic sculpture in which there is a turn away from the dynamic middle Hellenistic style toward Classicism. And in this period, too, Mrs. Lehmann has found the closest analogies to our figure, notably on the frieze of the Temple of Hekate at Lagina.⁹⁸

The Nike in Vienna⁹⁹ reveals a quite different style, dominated by a coherent verticalism and by closely and sharply cut folds of drapery. A discussion of its date (whether in the first century B.C. or in the Roman imperial period) must await further and more detailed investigation. But it should be mentioned that the newly found figure shows traces of repairs which would suggest a later rather than an earlier date for its successor.

Whether an extended left arm and other fragments of the corresponding southeastern akroterial Victory which we found near that corner belong to the counterpart of the new figure or to its successor in Vienna, also remains uncertain for the time being.

The Vienna Victory may belong to one of the several more or less extensive repairs during the half millenium that followed the enlargement and rebuilding of the temple around the middle of the second century B.C. Major restorations took place during the Roman imperial period. They affected the parapets, the bench supports in the lateral aisles, the threshold, and most extensively, the region of the bothros and the southeastern corner of the building. Fragments of Roman glass and the reuse of spoils from earlier building periods characterize these repairs, without furnishing easily determined exact chronological data. But they give the impression that the most extensive repair took place at a late period, not earlier than the third century A.D. It is not impossible that it occurred in the Constantinian age when in the northern part

⁹⁸ Idem, *Der Fries des Hekaterions von Lagina (Istanbuler Forschungen, II)*, Vienna, 1933, especially p. 30, fig. 18, pl. 5.

⁹⁹ Schober, *Oest. Jahresh.*, XXIX, 1935, suggested a date contemporary with the pedimental sculptures on the basis of not too close analogies.

of the Sanctuary, both the Anaktoron and the Sacristy were remodelled.¹⁰⁰ Several very crude and obviously late antique antefixes (Pl. 17a)¹⁰¹ of this period were found near by.

The marble frame of the bothros, including the pouring stone and the marble floor to its west, were remodelled¹⁰² at the same time to an extent which makes it impossible to determine the appearance of this part of the interior installation in the Hellenistic building. These floor slabs, posed on a foundation including spoils of marble and other material, are not in their original position. The curved lateral framing stones of the bothros (Pl. 13a) were recut from rectangular blocks to fit their present place. The hole in the big pouring stone with its recesses for a lid has been crudely and irregularly cut into an older fine block having no such hole or, at best, a very small one (Pl. 13f). The block itself may be in its original place as are the step blocks which flank it to east and west. A curious fact is that the pouring hole does not allow for the flow of liquid into the actual bothros behind it. The block is posed on the purplish porphyry rock which steeply ascends to its lower face at the northern end of the bothros and the hole opens onto the surface of this rock, but no channel leads from it into the bothros.

With all this goes the extremely rude recutting of the great threshold of the Temple which may be seen in the Austrian publication¹⁰³ and observed now in the preserved fragment of its eastern end. This threshold, originally a very high step, was roughly and obliquely cut away to form a ramp ascending towards the interior. It looks as if the ritual had changed in the late Roman age and required both the bringing of animals into the building and a modification of the bothros in the apse. The great stone in the apse posed on high rock in front of the bothros may originally have lacked a hole and been a mere prothesis for the person who performed the ritual libation to stand on. If it was cut to receive such libations, it is logical to assume that the bothros itself now served another purpose. All these things combined induce us to think that in the late antique age the taurobolia and kriobolia of the Magna Mater cult were introduced into the Samothracian cult. These rites, which developed in the middle Roman imperial period, would naturally have been attracted to a cult dominated from the beginning by the Great Mother who, by this time, was commonly identified

¹⁰⁰ *A.J.A.*, XLIV, 1940, pp. 336, 348; above, p. 11.

¹⁰¹ Acc. No. 49.514 A. Ht.: 0.24 m.; W.: 0.145 m., the latter corresponding to the second century B.C. type illustrated in *Samothrake*, I, pl. 31, fig. 1, which these late antefixes of slightly taller proportions crudely imitate. Several pieces of this late type were found at the southwest corner of the Temple.

¹⁰² It is curious that our predecessors did not notice the obviously late and, in comparison with the rest of the building, very crude character of this section.

¹⁰³ *Samothrake*, I, pl. 14, fig. 2, pls. 15, 16. On returning for their second campaign, the excavators found the threshold smashed. We have found, no longer in situ, only a section of the left part which clearly shows the secondary crude ramp cutting into an originally step-shaped block.

with Rhea or Kybele and whose rites were explicitly stated to have sprung from the same origin as those of Attis (Lucian, *De Dea Syria*, 15) in which the taurobolia and kriobolia developed.

It remains to mention single finds of some importance made sporadically or gathered from the various strata of our excavation. A few of these finds have artistic significance; others add evidence to our knowledge of the Samothracian cult.

In the former category are certain architectural pieces not hitherto mentioned. A handsome though fragmentary late archaic terracotta antefix (Pl. 17c)¹⁰⁴ was found included in the fill of the Arsinoeion period, to the south of the building. A marble antefix of Hellenistic type but of larger dimensions than those of the New Temple was discovered near by and may belong to the building adjoining it to the west (Pl. 17d).¹⁰⁵ A fragment of one of the corner capitals from the Ptolemaion (Pl. 17f)¹⁰⁶ was rescued from the walls of the old schoolhouse in Chora, a building that had been half destroyed by the Bulgarians during the war and was in repair in 1949.

Among the sculptural pieces added to the Museum, a fragmentary and badly weathered Hellenistic votive relief¹⁰⁷ that still exhibits some of its original graceful style (Pl. 17e) deserves notice. A matronly goddess wearing a peplos and probably a veil and having a scepter in her raised right hand, embraces a more youthful divinity in chiton and himation with her left arm. The group is derived from Attic representations of Demeter and Kore¹⁰⁸ and may well refer to their Samothracian equivalents, Axieros and Axiokersa. However, though in Samothrace the provenance of such a piece from the Sanctuary of the Great Gods is more likely than not, we found the relief half an hour to the east of the ancient town,¹⁰⁹ where it had fallen from a broken field enclosure in which it had been reused, and it could have been brought there from the town as well as from any other locality on the island.

Our collection of ceramics received welcome additions from the various strata of the excavations, confirming conclusions previously arrived at.¹¹⁰ Among them are,

¹⁰⁴ Acc. No. 49.851. Pres. Ht.: 0.087 m.

¹⁰⁵ Acc. No. 49.8. Ht.: 0.27 m. Dr. Eichler has called our attention to the fact that there is another antefix of this type in Vienna.

¹⁰⁶ Acc. No. 49.1021. See *Samothrake*, II, pls. 23 ff.

¹⁰⁷ Acc. No. 49.38. Thasian marble. Pres. Ht.: 0.36 m.; Pres. W.: 0.19 m.; Th.: 0.065 m.

¹⁰⁸ See especially: Athens, Akropolis Museum, L. R. Farnell, *Cults of the Greek States*, III, Oxford, 1900, pl. 26, fig. a. H. Speier, "Zweifiguren-gruppen in fünften und vierten Jahrhundert v. C." *Röm. Mitt.*, XLVII, 1932, pp. 1-94.

¹⁰⁹ At the locality Vassilikó. One might, therefore, be tempted to think of the ancient harbor Demetrium which is mentioned at some distance from the town in the story of the capture of King Perseus. But there is no harbor near by. See, for Demetrium, *Archaeology*, I, 1948, p. 47.

¹¹⁰ See *Hesperia*, XIX, 1950, p. 18.

again, a number of vases dedicated after ritual use and marked with an incised letter Θ, as abbreviation of ΘΕΟΙΞ. In the previous campaign, we found a large and complete graffito ΔΙΝ and suggested that this might be a word of the pre-Greek, presumably Thracian, language which, according to ancient testimony, was still used in the Samothracian cult in later antiquity.¹¹¹ A second occurrence of the inscription ΔΙΝ was found on a fragment from the inside of a glazed vase.¹¹² In addition, several times during the last campaign we found the form ΔΙ, for instance, on the shoulder of a pre-Hellenistic amphora (Pl. 18a)¹¹³ which has an incised ΙΑ, possibly the numeral 11, on the neck. There are, also, a number of fragments, some of them from the archaic period, showing the initial letter Δ. It thus seems almost certain that the form ΔΙΝ corresponds to ΘΕΟΙΞ and the abbreviations ΔΙ and Δ to the customary Greek abbreviation ΘΕ and Θ. Another graffito, incised upside-down on a glazed fragment of a bowl reads ΔΚ and it is tempting to interpret it as an abbreviation of ΔΙΝ ΚΑΒΕΙΡ (. . .) (Pl. 18b).¹¹⁴ A glazed archaic fragment preserved the upper part of the letters .ΞΚΑ., probably to be restored as the Greek equivalent [ΘΕΟΙ] ΞΚΑ [ΒΕΙ ΡΟΙΞ]. Whether the evidently non-Greek graffito ΔΕΝΤ incised in big letters on the shoulder of a coarse archaic amphora (Pl. 18c)¹¹⁵ is related to the same Thracian noun for Gods must be left to the consideration of linguists.

We also found more instances of graffiti using an Α alone as an initial alpha, probably related to the names of the Samothracian divinities beginning with 'Αξιο. . .¹¹⁶ Among other as yet unclarified graffiti is an example of a ΠΑ or ΠΑΙ in ligature under the foot of a coarse bowl (Pl. 18d), possibly the invocation ΠΑΙ related to the Theban cult.¹¹⁷ On the glazed foot of a large vessel part of a longer inscription in archaic letters runs from right to left ΕΚΑΙΕ (ἔκαιε or . . . ε καὶ ἐ . . .).¹¹⁸

Few marble inscriptions were found in our excavations in 1949, apart from those mentioned previously, and nothing that deserves discussion in this preliminary report. We have, however, added to the Museum in Palaiopolis the remnants of a collection of antiquities previously preserved in the School, and lately in the Church, in Chora, where we found it threatened by neglect and vandalism. It includes a considerable number of Samothracian inscriptions already known and published, although some of those which were previously recorded have disappeared.¹¹⁹ In this collection, there

¹¹¹ *Ibid.*, pp. 17 f., fig. 30.

¹¹² Acc. No. 49.620.

¹¹³ Acc. No. 49.848. Pres. Ht.: 0.20 m. From fill of the Arsinoeion period.

¹¹⁴ Acc. No. 49.949.

¹¹⁵ Acc. No. 49.777. Pres. Ht.: 0.09 m. From the sixth century layer near the clay altar

(above, p. 4).

¹¹⁶ See *Hesperia*, XIX, 1950, p. 17.

¹¹⁷ Acc. No. 49.558. Diam. of foot: 0.038 m. Found on surface. See *ibid.*, p. 17, fig. 32.

¹¹⁸ Acc. No. 49.560. From the fill of the Arsinoeion period, but in clearly archaic setting.

¹¹⁹ We identified as still preserved: *I.G.*, XII, 8, Nos. 156, 167, 186b, 210, 219, 230, 236, 238, and p. 39, listed for the year 48 A.D.; *B.C.H.*, XLIX, 1925, pp. 254 f. and 256 f. Ten of the items previously listed as in this collection are now missing.

were also, however, a number of texts, to our knowledge, so far unknown. Mr. Kallipolitis will publish them in a separate article. His acute observation has also contributed a new term for a part of the Samothracian sanctuary, correcting our reading of a marble slab in the form of a Hellenistic *tabula ansata* found in 1939 in the Anaktoron from BATO to ABATON (Pl. 18e).¹²⁰ The term *abaton*, used for inaccessible sanctuaries, may here well refer to the higher rear part of the Anaktoron which, according to the bilingual text of the Roman period which we found in 1938 in front of its doors, was accessible to the mystae only after their initiation. It seems quite possible that this slab with the label "Abaton" was inserted in the Hellenistic building near those doors and, in a later restoration, used as a building stone in the southern part of the Anaktoron, where we found it. If this is true, we may conclude that the northern secluded part of the building bore the official name "abaton" rather than the more common adyton.

Among a variety of single finds, we may mention a badly worn lead tessera on which the significant symbol of a ram's head may still be recognized on one side.¹²¹ It would seem, then, that in Roman times such lead tokens were used as tickets of admission in Samothrace as well as in the Eleusinian cult of Athens. All these things have their importance for a gradual reconstruction of the character and history of the Samothracian Sanctuary, though many of them are objects of patient and somewhat tedious study rather than of delight. But as we were rewarded by the discovery of fine sculptures during the last campaign, single, if minor, objects are also of impressive quality. We may conclude this report by exhibiting one particularly fine item from the continually growing collection of lamps used in the nocturnal ceremonies (Pl. 18f),¹²² a black-glazed, double-spouted archaic terracotta lamp of precise form decorated with incised and reserved concentric circles.

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¹²⁰ Acc. No. 39.733. Broken at left end. Pres. L.: 0.18 m.; Ht.: 0.17 m.; Th.: 0.066 m. Pentelic (?) marble. The back, the lower and right edges are roughly cut for insertion into a wall. The upper edge is smooth and it seems that the slab was recut from an earlier block. The *tabula ansata* is of the pre-Roman variety, the tablet having curved corners.

¹²¹ Acc. No. 49.892. Surface find southwest of Arsinoeion.

¹²² Acc. No. 49.771. Diam. 0.086 m. (with spouts: 0.12 m.). Ht.: 0.02 m. From the late fifth century fill outside the Arsinoeion, above p. 8. Fragments of a replica were found in the late archaic layer around the altar west of the Arsinoeion and date the type not later than the late sixth century B.C.

NEW EVIDENCE ON THE ATTIC PANHELLENION

IN THE time of Trajan, Plutarch, *Pericles*, 17, advertised as an example of the Olympian's *φρόνημα* and *μεγαλοφροσύνη* an attempt unmentioned by Thucydides or, for that matter, in any other extant ancient work, an unsuccessful attempt to establish at Athens a super-league of Greek leagues, an organization of all Greek cities, to work for the common good of all Greeks. In 131/2 A.D. (cf. *S.I.G.*³ 842), the Panhellenion, a super-league of all Greek cities, was established at Athens by the emperor Hadrian.

The Attic Panhellenion, its goals and membership, have been well handled by Paul Graindor, *Athènes sous Hadrien* (Cairo, 1934), especially pp. 102-111. For his preparation Graindor was particularly indebted to M. N. Tod, "Greek Inscriptions from Macedonia," *J.H.S.*, XLII, 1922, pp. 167-180. There is no need to rehash the whole material, but it may be of service to collect references to more recent discoveries concerning the Panhellenion.

TOD'S LIST OF THE KNOWN PANHELLENES

THE OLD NAMES

T. Flavius Cyllus came from Hypata (*A.J.P.*, LXIX, 1948, pp. 440 f.).

Tib. Claudius Herodes Atticus. For him *I.G.*, II², 1088 should no longer be cited as evidence (cf. *Hesperia*, X, 1941, p. 366).

Cn. Cornelius Pulcher is attested as archon by *Corinth*, VIII, i, Nos. 80 and 81.

Dionysius Pathas (?). Delete the element "Pathas" (cf. A. Wilhelm, *Glotta*, XIV, 1925, p. 79).

NEW NAMES

Κασσιανός Ἀντίου ὁ καὶ Συνέσιος, of uncertain date and provenience, is attested as archon by *I.G.*, II², 3712.

A. Cornelius Postumus and [— —]chus are attested as *synedroi* from Sardes by *Hesperia*, X, 1941, p. 83, No. 35 (second century).

Pardalas, Panhellene designate, of Lyttos, is attested by *Inscr. Cret.*, I, p. 205, No. 56 (Πανέλληνα ἀποδειχθέντα τοῦ συνεδρίου, cf. G. Klaffenbach, *Klio*, XXXVIII, 1937, p. 255).

Flavius Sulpicianus Dorion, a Cretan of perhaps Hierapytna, is attested as archon by *Hesperia*, XII, 1943, p. 74, No. 22, dated by the editor (Raubitschek) shortly after 160 A.D.

An unknown *vir clarissimus*, [πολλῶν πόλεω]ν πολεΐτ[ην] (cf. *I.G.*, II², 3817 for what to expect in lines 4 and 5), is attested as an ex-archon by *I.G.*, II², 3627, (dated by Kirchner in the second half of the second century).

For Panhellenes from Sparta see A. M. Woodward, *B.S.A.*, XXVII, 1925-1926, pp. 234 f.

PUBLICATIONS OF THEIR OFFICIAL DOCUMENTS AT ATHENS

I.G., II², 3194 (= III 70), which Graindor (pp. 23 and 110) connected with the Panhellenes, has in the writer's opinion nothing to do with them (see *A.J.P.*, LXIX, 1948, pp. 438 f.).

I.G., II², 1092, which also has no connection with the Panhellenes, will be treated elsewhere.

I.G., II², 1089 (= III 14) has been republished with a new fragment in *Hesperia*, X, 1941, pp. 82 f., No. 35.

I.G., II², 1088 (= III 12+13), now combined with *I.G.*, II², 1090 (= III 15) and *I.G.*, III, 3985, has undergone considerable revisions by the author who presents photographs and a new arrangement of fragments in *Hesperia*, X, 1941, pp. 363-368. This inscription contains the Thyatirene decree. The passage (lines 7-14) beginning at the end of the motivation with a reference to a decree of the Panhellenes about recording imperial benefactions is here reproduced with some changes: ἀνα]γράψα[ι Ἀθήνησι] ἐν Ἀκροπόλει ἐ[ν στήλῃ πάσ]ας δωρεὰς ὡς [ἕκασται ἐδόθησαν ὑπὸ τοῦ] μεγίσ[του τῶν π]οτε βασιλέων Αὐ[τοκράτορ]ος Καίσαρος Τραϊα[νοῦ Ἀδριανοῦ Σεβαστοῦ] Ὀλυμπί[ου Πανελλ]ηνίου Διός, ἐφ' [ὅτῳ τι τοι]οῦτο ἔδοσεν ἀγα[θῇ τύχῃ] δεδόχθαι τῷ Θνα]τε[ι] ρην[ῶν] τῷ δήμῳ τό[δε μὲν τὸ ψήφ]ι σμα ἐνχαράξαι λίθ[ῳ καὶ προσαναθεῖναι, ὅπῳ]ς [ἀν] ἐν [.] ἔκδηλον [ὑπάρχῃ τοῖς Ἑλ]λησι ἅπασιν ὄσων [εὐεργεσιῶν τ]ετ[ύχηκ]ε α[ὐτὸ (the ethnos) παρὰ τοῦ βασι]λέως, ὅτ[ι ἰδία καὶ κοι]νῇ πᾶν τὸ τῶν Ἑλλή[νων ἔθνος ε]ὐεργέ[τ]ησ[εν] ὁ βα[σιλεύς, κτλ.]

Here the Thyatirene decree seems to contrast the entire *ethnos* with the individual *ethnē*, which I take to be not so much a term indicating Roman provinces as a term borrowed from the *sermo publicus* of the ancient Pylaeo-Delphic Amphictyony: τὰ τε ἔθνη κ[αὶ] in line 7, and [πάντα τὰ ἔθ]νη τῆς ἀπάσης Ἑλλάδος in line 6. Of course, the decree stresses particularly the rôle of Hadrian as a Hellenistic *basileus euergetes*, for which see W. Schubart, "Das hellenistische Königsideal nach Inschriften und Papyri," *Archiv für Papyrusf.*, XII, 1936, pp. 1-26. Hadrian is called *basileus* not only in the passage cited above but also in lines 27 and 30, while on the loose fragment *g* the verb *εὐεργετέω* occurs twice.

THE INSCRIPTION AT CYRENE

Lines 2-12 of the inscription well read and carefully published by P. M. Fraser, "Hadrian and Cyrene," *J.R.S.*, XL, 1950, pp. 77-87 (with photograph), contain the following imperial letter of 134 A.D.:

Αὐτοκράτωρ Καίσαρ θεοῦ Τρα[ιανοῦ Δακικοῦ Παρθικοῦ νιός, θεοῦ]
 Νέρωνα νιωνός, Τραιανὸς Ἀδριαν[ὸς Σεβαστός, ἀρχιερεὺς μέγιστος,]
 δημαρχικῆς ἐξουσίας τὸ ἱθ, ὑπατ[ὶ]ος τὸ γ, πατὴρ πατρίδος,]
 5 Κυρηναίοις [χαίρειν]

Ὁ ἄρχων τοῦ Πανελληνίου ἐφέλκει ἐπιστεῖλαί μοι π[ερὶ -----]
 τὰ δόξαντά μοι ἀντέγ[ρ]αι καὶ ὑμῖν ἔπεμψα τὴν προ[--- ἣν ἐπέστειλε Σαλούιος]
 Κᾶρος ὁ κράτιστος ἀνθύπατος· *vacat* εὐτυχεῖ[τε *vacat* Περὶ Κυρηναίων λεγόντων ὅτι]
 δέχεσθαι δεῖ· οὐ μέντοι δίκαια ἀξιούσιν, τῶν αὐτ[-----]
 10 νος Ἀχαιοὺ καὶ ἀκρειβῶς Δῶρον· αὐτοὶ δὲ ἰθαγεν[εῖς -----]
 προσεκλήσαντο τὴν προσηγορίαν ἀπὸ τοῦ ἐπικρυ[----- πό]
 λιν, Κυρηναίων δὲ δύο συνέδρους πεμπόντων[ν -----]

New restorations in line 6 at the end of lines 7 and 8 are here introduced to indicate the kind of document I think we have, but they are not certain. The equally tentative εὐτυχεῖτε (?) which Fraser restored at the end of line 12 on the theory that the letter of Salvius Clarus came in lines 8-12, is here eliminated as inconsistent with what I envisage. The word ἐφέλκει in line 6 does not to me suggest the meaning "is hesitant" (so Fraser) but a synonym for ἐπάγει, ἐπαίρει or ἐπισπᾷ. If I am right, the emperor says something like this: "The archon of the Panhellenion is making them consult me by letter concerning [your eligibility]. I have replied with a statement of my opinion, and to you I have sent the [--- which] the *clarissimus proconsul* [Salvius] Carus [submitted]. Farewell." Then inasmuch as the Cyrenaeans do not know the text of the communication from the Panhellenes, an explanatory brief is added by the *ab epistulis* somewhat as follows: "[Re the Cyrenaeans, they think that the Panhellenion] should receive them. Their claim, however, that [they can trace their ancestry back to] Achaeus and even Dorus is false. They are just Libyans who have acquired the Hellenic name by surreptitious entry into citizenship. The would-be Cyrenaeans are sending two *synedroi*."

Probably every affiliated city had two *synedroi* (cf. *Hesperia*, X, 1941, p. 83), as each *ethnos* in the Pylaeo-Delphic Amphictyony had two *hieromnemes*.

About half of line 8 seems to have been lost to judge from line 2 where the restoration is certain. In other words, space for about 32½ letters has been lost by fracture in line 8. With two letters for the completion of εὐτυχεῖ[τε and with seven blanks after as before the latter, the remainder of the restoration is reduced to about 23½ letters, where counting iota as half a letter, we have restored 22½.

Lines 13-24 were probably labeled Κεφάλαια ἐξ ἐπιστολ[ῆς ἀνθυπάτου], and if so, they contain sections from the aforementioned report from the proconsul of Crete and Cyrene, Salvius Carus. The version sent to Cyrene by the emperor was a summary, an incomplete text, of which, moreover, the Cyrenaeans have engraved only a part commencing Προσκεκλήμενον δὲ (sc. Κάρου) ἐπὶ τέλους ἐνί, ὅτι (followed by the proconsul's own words).

Lines 25-49 may well contain an extract from an earlier edict of the emperor, as Fraser interprets it with reference to the reconstruction of the *politeuma* after the massacre by the Jews. The Cyrenaeans are citing this early edict in order to show that the new citizens are real Greeks and not ἰθαγενεῖς passing as Greeks.

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A CONTRIBUTION TO THE VERGIL-MENANDER CONTROVERSY

(PLATES 19-23)

I.

IN REFERRING to a debate which, by spoken and by written word, has now lasted for more than half a century ¹ I shall for convenience sake and without ulterior intent speak of Menanderites and Vergilians and call the central object of their mutual contention "the Head"; and by way of preface venture to remark that, while among the Menanderites there has been no hesitation (and most recently even a certain scornfulness) in proclaiming the justice of their cause, the Vergilians—perhaps because of their straightened ranks and a sense of the disapproval with which they have been regarded—have been too soft-spoken, too tentative in their assertions, and have injured their defense by hesitating to attack, by not daring to say (as they should have) that the identification of the Head as Menander is the worst mistake in judging sculptural style that the recent and the present generations of our profession have committed.

As long ago as 1918, Lippold correctly listed ² most of the essential reasons against identifying the Head as the comic poet Menander, pointing out that, while such a claim depended uniquely on a supposed identity of the Head with the Marbury Hall medallion bust inscribed with Menander's name, the medallion could not be a version of the Head because the typological details, particularly in the arrangement of the hair, essentially failed to correspond; but he did not drive his objections home. Seventeen years later, J. H. Crome brought out under the auspices of the Vergilian Academy of Mantua for the bimillennial celebration of Vergil's birth a monograph on *Vergil's Portrait*,³ in which the whole case was fully reviewed and ably argued; but the little Mantuan volume seems almost unknown in America and too little read in Europe. In 1940 in an essay on sculptural style which sought to re-examine much of the *Familiar Statuary in Rome*,⁴ I argued the stylistic chronology of the Head but, perhaps unwisely, virtually ignored the Marbury Hall medallion as irrelevant. Most recently, Herbig ⁵ at last concentrated attention on the crux of the whole controversy

¹ The bibliography of the controversy is easily accessible in Herbig's article (see Note 5). Cf. also Fr. Poulsen, *From the Collections of the Ny Carlsberg Glyptothek*, III, 1942, pp. 93-106.

² Georg Lippold, *Ikonographische Probleme*, Röm. Mitt. XXXIII, 1918, pp. 1-18.

³ Johann Friedrich Crome, *Das Bildnis Vergils*. Reale Accademia Virgiliana di Mantova. 1935. (Reprinted from *Atti e Memorie* of the Mantuan Academy, XXIV).

⁴ Rhys Carpenter, *Observations on Familiar Statuary in Rome* (= *Memoirs of the American Academy in Rome*, XVIII, 1941), pp. 96-101.

⁵ Reinhard Herbig, *Zum Menander-Vergil Problem*, Röm. Mitt. LIX, 1944-6, pp. 77-87, pls. 13-17.

by publishing new photographs of the Medallion from a cast in Leipzig, here produced on Plate 19, a, c, and d, in order to make clear what had not always been apparent in older illustrations,—the total basic lack of all that supposed correspondence between the Head and the Medallion on which the whole case for Menander hangs (since all other evidence is secondary, vague, inconclusive, or irrelevant).

It is only the bare truth to say that, when judged by any method which the present-day study of ancient sculpture admits as valid, there is not a single point of identity between the Marbury Hall medallion bust of Menander and the Head (which latter, proleptically, I shall henceforth often call Vergil). It may be tedious to rehearse in full detail all those individual features on which the eye should seize unhesitatingly and instantly; but since so many have protested that they do not see and cannot discover any fatal differences between Medallion and Head, there is no other recourse for sound scholarship. The following, therefore, are the characteristic marks and identifying features which will be found on any and every of the forty⁶ extant marble versions of the Head, lacking which no head can be claimed to belong to the series (cf. Plate 19 b, e, and f):—

(1) The Arrangement of the Hair:

In front, the hair is parted over the left temple in long strands. To the left of the parting, these strands hang in vertical waves in front of and over the fully uncovered left ear, while to the right of the parting they are brushed into a conspicuous *horizontal* set of wisps across the top of the forehead with their tips pointing downward beyond the axial center of the face.

In the two profile views, the hair is treated in contrasted and strikingly different manner at the ears, hanging *vertically* around the left ear in the manner just described, but being brushed *horizontally* forward above and behind the right ear, in long strands which originate at the back of the head.

On the nape of the neck, the hair is unshorn and diverges strongly from the occipital curve above.

(2) The Shape of the Head:

Seen in profile, the skull is long, with prominent occipital bulge and a continuous and rather flat curve running back from the top of the straight upper forehead. Seen

⁶ To Crome's inventory of 38 replicas (*Das Bildnis Vergils*, pp. 67-71) should be added:

39. Rhodes. In the courtyard of the Castle, mounted on an unrelated statue (from Kos?). Chin and nose broken; otherwise an outstandingly good copy (I had an opportunity to inspect it in August, 1950). Inadequately reproduced, Laurenzi, *Ritratti Greci*, pl. XLVII. 5.

40. Rome. From the Area Sacra dell' Argentina. The left of the head has been split vertically, destroying the right forehead and hair but leaving most of the nose and all of the mouth and chin undamaged. Waterworn, but powerfully modelled.

Laurenzi, *op. cit.*, p. 139, speaks of 42 replicas.

full-front, the skull is narrow for its height. The horizontal axis through the eyes lies halfway between chin and crown. Owing to the broad jaw and prominent high cheek-bones, the face approximates a vertical rectangle; the area bounded by the forehead-lock above, the line of the mouth below, and the ears on either side, would form a square if it were not for the sunken cheeks.

(3) The Features of the Face:

The eyes are deep-set and close together, being separated by a narrow-ridged nose. The latter is long, despite its thinness, and slightly aquiline. The cheeks are deeply sunken. The lips are lightly parted.

In the profile, nose and forehead tilt sharply back from the axial line along the chin and lips.

(4) The Neck:

This is thin and delicate; but its most remarkable feature is the throat with the Adam's apple pathologically protruded above a deeply sunken cavity. (Cf. also Plate 22, right). The head is tilted toward its own proper left, but turned slightly toward its proper right.

It is only reasonable to enquire how much of all this reappears in the Marbury Hall medallion. Consulting this (Plate 19 a, c, and d) item by item, we shall find that,—

(1) There is *no parting* in the hair, which instead of being plastically built of detached strands is densely covered with fine wiry meshes. There is *no horizontal forehead lock*, all the hair being uniformly brushed forward from the crown. There is *no contrasted treatment* at the ears, the long wiry meshes being identically brushed *diagonally* forward and downward past the front of either ear. Thus, not merely is there no opposition between the two profiles, but neither of them reproduces either of the aspects of the Vergil.

(2) Making every allowance for any distortion due to the attachment of the bust to the field of the medallion, the skull in profile shows *a high round dome* with a very elevated, but at the top receding, forehead-line. Owing to this abnormally high crown, more of the head lies above the axis of the eyes than below. Seen full-front, the skull is broad at the temples but weakly narrow in the jaw; and as a result *the face is pear-shaped*.

(3) The eyes are set in *shallow* sockets and are rather large. The nose is *neither long nor aquiline*. The cheeks are *full*. In profile, a line prolonged past the chin and edge of the lower lip strikes the bridge of the nose, indicating a wholly different tilt in the features.

(4) There is *no pathological protrusion of the throat*.

Only one conclusion is possible: the two types are strangers to one another. If the Marbury Hall medallion was carved in late imperial Roman times by a careless or conscienceless craftsman working freehand from a copy of the Head (the difference in scale precludes any direct mechanical transference), then we shall have to say that he left out every distinguishing characteristic. But in that case, what justification can there be for insisting (or even supposing) that the Medallion derives from the Head at all?

Why, then, in the face of these numerous, overall, and glaringly obvious disparities, is there still so strong and so obstinate a following in the Menanderite camp? I can only suggest that very few have really looked at the Marbury Hall medallion. Or perhaps, as the most mitigating circumstance, it should be taken into account that ancient portraiture is by its very nature an uncertain and illusive discipline, in which the subjective interest in individual personalities outweighs the objective criteria of type and style. How the admirable and indisputably able Studniczka was able first to convince himself and then to persuade almost the entire generation of his contemporaries (but not Lippold and not Furtwaengler!) into seeing a resemblance which somatically and materially did not exist, will remain one of the curiosities of classical scholarship. It would almost seem that, once the mind has been struck by the suggestion of personal resemblance, it is carried away by a ready-made conviction. Like the younger Cyrus when he sighted the Persian king, we cry τὸν ἄνδρα ὁρῶ! and charge ahead.

That there is herein some element of prejudice derived from already fixed opinion, may be shown by several pleasant anecdotes attaching to the Menanderites. But since I feel very strongly that the *argumentum ad hominem* is never a permissible substitute for the *argumentum ad rem*, I shall content myself with the observation that more than one of the Menanderites having, for one reason or another, failed to identify a copy of the Head as such, has publicly proclaimed it for a Republican or Augustan Roman portrait, while conversely, one of this same number reproduced the Early-Augustan and indisputably Roman head which is shown on our Plate 20 e, f but, mistaking it for a copy of the Head, labelled it "Menander."

Even on the most general grounds and with all considerations of sculptural style and period put to one side, it should be clear that the physically ailing and melancholy nature so forcibly presented by the finest versions of the Head, such as that in the Seminario Patriarcale in Venice (Plate 19 b) so justly put in the foreground by Crome, or the Torre Annunziata herm in Boston (Plate 22, right) which Crome did not rate high enough, perhaps because he had not seen it in the living marble, is an extremely unfortunate choice for the elegant, foppish, and handsome Athenian of Phaedrus' fifth fable who

unguento delibutus, vestitu affluens
veniebat gressu delicato et languido

so that, at sight of him, Demetrius exclaimed,

“ Quisnam cinaedus ille ?
Homo (inquit) fieri non potest formosior ! ”

And secondly, on grounds of sculptural manner and style, the Head could not possibly be that of the Menander made by the two sons of Praxiteles and dedicated in the Athenian theater of Dionysos around 300 B.C. Recent students of Greek portraiture, even when they accept the identification with Menander, have tended more and more to see that such a date for the archetype of the Head, and such a workshop, cannot be upheld. Thus Laurenzi in his well chosen and ably commentated *Ritratti Greci*⁷ sees in the Head “ la maestria raggiunta dagli artisti del ritratto nell’ Ellenismo medio ” and proposes 230-220 B.C. as an acceptable date. It is interesting to quote also his subjective impression of an “ espressione appassionata . . . composta di sentimenti complessi, di ardore e insieme di *sofferenza intellettuale* ” (the italics are mine); but it is even more important to point out that, since the standard likeness of Menander throughout Hellenistic times must have been that first established by the sons of Praxiteles during the poet’s own lifetime, any portrait in a style so different that it exemplified a later Hellenistic tradition, could hardly have supplanted the official and original version so completely as to be found all over the Roman empire to the exclusion of the authentic likeness.

But enough of Menander, whose inauspicious name is still too much in the mouths and on the pens of the Vergilians!

Yet even with Menander’s name expunged, the only alternative identification which has ever been seriously urged, that of the Roman poet Vergil, has proven very generally unattractive; so that there must be some archaeological or psychological reason why, to the normal and healthy antiquary, the Head should not be Vergil.

Such a reason is not far to seek. Briefly, (1) Vergil was a Roman, and the artistic aura of the Head is Greek—Hellenistic Greek at that; (2) Vergil was an Augustan poet, and Augustan art is classicistic; (3) Roman portraits were scrupulously realistic, and the Head is an imaginative recreation rather than a literal bodily presentation.

There is enough truth in every one of these generalizations to give them psychological strength; but not one of them is completely accurate, and not one of them militates against the identification as Vergil. Let us take them up in turn:

(1) Let it be granted, without qualification or reserve, that the original from which the Head is copied must have been the work of a Greek bronze-caster, a work that was thoroughly Greek in technique and stylistic tradition. What then? Was it not Vergil himself who wrote in his Aeneid,

Excudent alii spirantia mollius aera,

⁷ L. Laurenzi, *Ritratti Greci* = *Quaderni per lo studio dell’ archeologia*: fasc. 3-5. Florence, 1941.

and will anyone doubt that by *alii* he meant Greeks? Indeed, he might have had his own portrait freshly in mind when he composed the famous line; but more probably he was merely echoing a decision of his great patron, the official Augustan admission that the artists for the Roman world were to be recruited from the Greek provinces of the empire.

(2) Vergil was an Augustan poet; but he died in 19 B.C. before the classicistic phase of Roman art had begun. Greek art at Rome was not classicistic during the Late Republic, but Hellenistic. It did not become classicistic until Augustus encouraged or commanded it to become so; and this great change (as can be proven) did not take place until after Vergil's death.

(3) That Roman portraits were scrupulously realistic is, of course, true only for certain periods and social levels. The statement should be untrue for any portrait of Vergil made during his life-time by command of the emperor or of some wealthy and well educated Roman patron.

The basic weakness in the whole Vergilian cause has been our failure to explore and demonstrate the Early Augustan portrait style. Had we done so, we should have had no difficulty in proving that the Vergil is an outstandingly good and thoroughly characteristic example of that style.

II

I could have wished that Laurenzi, having once detached the Head from Menander's time, had brought its date down another half century; for I must confess not merely that I cannot discover anything of any late third century B.C. style in it, but—and as a convinced Vergilian I have no hesitation in making such an admission—that there is a great deal reminiscent of the early second century B.C. I have repeatedly made the experiment of paging through the good published collections of Greek and Roman portrait sculpture and, with only traits of style in mind, fitting the Vergil head into the series. On the assumption that Laurenzi's *Ritratti Greci* is as accessible to the reader as it deserves to be, I have thus searched through his gallery of Greeks and find myself able to associate the Vergil stylistically (though in no case very closely or convincingly) with only the following out of his entire series,—

No. 34 — the bronze boxer head from Olympia, date unknown;

58 — Aristippos (?), date uncertain, but surely not contemporary with that philosopher;

69 — Alexander the Great, from Alexandria, now in Geneva, date unknown;

74 — Euthydemos of Baktria, *ca.* 190 B.C.;

- 77 — Antiochos III (?), date (if correctly identified) 200-190 B.C.
- 82 — bronze head from the Antikythera wreck, Laurenzi's date, 180-170 B.C.;
- 87 — Alexander the Great, from Pergamon, Laurenzi's date *ca.* 150 B.C.;
- 92 — the famous bronze head from Delos, Laurenzi's date 150-140 B.C.;
- 94 — the "Hellenistic Ruler" in the Terme, Laurenzi's date 150-140 B.C.

Reviewing the suggested dates it is clear that, if they are acceptable, I should have to concede that the style of the Head is related to that of the first half of the second century B.C.,—a very important period for portraiture, in which for the first time an adequately plastic technique was developed for this branch of sculpture. But the last parallel cited, the "Hellenistic Ruler" of the Terme Museum, gives a clue wherein the error may lie in thinking that the Head should be ascribed to this mid-Hellenistic period (and hence, whomsoever it represents, could not be Vergil).

It is still a very prevalent mistake to insist that the "Ruler" represents a Hellenistic prince; but that this is indeed an error, is demonstrable. Except for the head and neck, all the rest of this imposing bronze has been derived, with only minor modifications in the pose, from the Herakles of Polykleitos,⁸ whose powerful but rather strictly stylised anatomical divisions have been further exaggerated into superhuman strength. Plagiarism so direct will do for a period of eclectic revival, but is not a second century B.C. procedure (however much of Pheidias and other fifth century influence may be detected in the great altar of Pergamon). On this neo-Polykleitan Herakles there has been imposed a portrait head⁹ in life-size (and hence a trifle too small for the heroic body) in a style for which there are sufficient parallels to prove its origin in the second quarter of the first century B.C. The hair, as in the Vergil, is long and unshorn on the nape; but though, like the Vergil, it is trimmed square about the forehead, there is no forehead-lock, but a protruding shelf of dense hair which draws a deep horizontal line of shadow across the top of the forehead. This is a Roman hair-fashion of the Late Republic, which may be found on some of the coins of Agrippa¹⁰ or those of Mytilene which show a head of the deified Theophanes, the intimate friend of Pompey. These latter coins (Plate 21 a and b) were struck under Tiberius, but, as they are not in Claudian style, must reflect a bronze portrait made during Theophanes' lifetime, quite possibly in Rome, shortly before or after the middle of the first century B.C. Both Theophanes and Agrippa are further characterised, like the "Ruler," by deepset eyes with a prominent forehead-bar above the accentuated bridge of the nose, and are powerfully modelled in cheek and jaw.

⁸ The Terme copy well illustrated, Alessandro della Seta, *Il Nudo nell' Arte*, I, figs. 114-5.

⁹ Not here illustrated, because so frequently reproduced elsewhere, e. g., Hekler, *Bildniskunst der Griechen und Römer*, pls. 83-84; Laurenzi, *op. cit.*, pl. XXXVIII. 94.

¹⁰ As on the coin reproduced as fig. 6 in L. M. Ugolini, *L'Agrippa di Butrinto* (R. Istituto di Archeologia e Storia dell' Arte; Opere d'Arte, Fasc. IV). Rome. 1932. Cf. Grueber, *Coins of the Roman Republic in the British Museum*, pl. LXXI. 8.

The splendidly keen head which Schweizer has recently rescued from the comparative oblivion of the Sala delle Pitture in the Vatican,¹¹ seems to belong in this group.

All of these heads, in the way that they are modelled, reflect (whether by direct atelier inheritance of their artists or by deliberate revival) the powerful plastic resources of mid-Hellenistic portraiture; and hence they have much to suggest the second century B.C. But the facial types of some of them, the known identity of others, and the hairdress of all of them, betray their true date and environment.

Much the same is true of the Vergil head. It too is of Greek workmanship; it too draws on the plastic resources of mid-Hellenistic portraiture; but it too reflects a racial type that is not Greek (nor yet, since Vergil was from Mantua, Latin-Roman or south-Italian); and though it displays a different hairdress, this also reflects a characteristically Roman manner that betrays its date and environment. For it is *the official hairdress of the early-Augustan court*.

Herbig has given us¹² the head of Ummidius Durmius Quadratus from Cassino as a first pertinent example of an unquestionably Roman portrait done in the same manner as the Vergil. To this I should like to add the portrait head from the house of "Apuleius" in Ostia, which Ricci published in the *Bollettino d'Arte* for 1938¹³ and which I am here reproducing from that source (Plate 20 a and b). The method of building up the facial structure by utilising the cheekbone and the jawbone as the chief carrying elements of the design of the lower face; the substitution of the orbicular muscles for the more purely linear definition of the eyebrows and eyelids of the Greek glyptic tradition in order to concentrate and intensify the gaze; the almost concave flattening at the temples to bring the cranium into structural prominence—all these devices are used to impart the same air of realistic pathos to the Ostia head as to the Vergil. In profile, the stylistic identity is equally impressive; and to judge from what is visible in the photographs, the contrasted brushing of the hair at the ears is likewise indicated.

A third head, again portraying an individual as unlike Vergil as could well be imagined, yet offering remarkable similarities in the artistic handling of the resources of expression and the mannerisms of style, is reproduced (Plate 20 c and d) from Schweizer,¹⁴ who assigns it to his "Idealising Plastic Manner" (*Plastisch-idealistischer Stil*) and, if I understand him aright, holds it to be a Hadrianic copy of an original from the 20's B.C. As in the Vergil, the hair is treated in large loosely divided strands which hang vertically about the left ear (and perhaps—to judge from the photograph—are brushed horizontally over the right?); the hair on the nape is

¹¹ Bernard Schweitzer, *Die Bildniskunst der Römischen Republik*. Leipzig, 1948. figs. 36-37.

¹² Pls. 15-17 of the article cited in Note 5.

¹³ *Bollettino d'Arte* XXXII, 1938, pp. 558-570 and figs. 10-11.

¹⁴ *Op. cit.* in Note 11, p. 113 and figs. 169 and 174 (= Copenhagen, Ny Carlsberg Glyptothek, no. 589).

unshorn and low; the forehead bar is modelled over the brows and lined with vertical furrows over the nose; the zygomatic muscles are strongly emphasised: the mouth and chin are similarly treated as in the Vergil. The most obvious difference is in the eyes.

Vergil's long straggling locks, brushed horizontally across the forehead from a far left-hand parting, recur on a Roman head in Ince Blundell, which Ashmole in his catalog of that collection¹⁵ classes as late first century B.C. (Plate 20 e and f). The nose, lips, and chin are modern; and the tips of the forehead locks have been supplied by the restorer. But the broken surfaces to which they are attached permit no very different solution; while the deepset eyes under modelled brows, the structural emphasis on cheekbone and jaw, put this head into the same group as those we have been discussing. The hair, which hangs in long locks above the ear, has been brushed horizontally forward from the back of the head. No doubt, examination of the other (unpublished) profile would show, in contrast, the strands vertically pendant.

For, that this strange habit of thus differentiating the arrangement of the hair on the two opposed sides of the head, which is such an invariable characteristic of the Vergil, is equally characteristic of early-Augustan male portraits of members of the imperial family and those attached to the court, has either not been observed or has not been sufficiently publicised by modern scholars. Crome, in his monograph, pointed out that this fashion could be traced back as far as some of the Cicero portraits and forward as far as Agrippa; but apparently in 1935 he had not yet noted how widespread the fashion really was, and that Augustus himself followed it.

The two very similar heads on the Augustan coins which carry identical reverse designs and were minted in the East prior to 20 B.C., here reproduced on Plate 21 c-f (from specimens in the collections of the American Numismatic Society, to whose unfailing helpfulness I owe the excellent photographs), both show the emperor's head in profile toward the right. Yet the engraver has varied the two dies by cutting the hair-strands vertically pendant above the ear in one case but brushed horizontally above the ear in the other. If this distinction be judged too slight to be significant, the horizontal brushing is much more fully recorded,—and almost exactly in the manner of the Vergil, except that the heads face in opposite directions,—on another gold coin of Augustus also minted in Asia and hence also of early date (Plate 21 g). Still more convincingly, another pair of coins (Plate 21 i and j) from the same eastern mint, both issued in the same year and both with profile toward the right, fully and carefully distinguish the two manners of brushing the hair. As is proved by their legend, IMP. IX. TR. PO. V, they were both struck in 19 B.C., which was the year of Vergil's death.

I should like to have the head with the vertical hair on one of these last coins

¹⁵ Bernard Ashmole, *A Catalogue of the Ancient Marbles at Ince Blundell Hall*, Oxford, 1929, No. 88 on p. 42 and pl. 33.

(Plate 21 j) compared with the marble head of Augustus which L'Orange published in 1935 in the volume of essays in honor of Prof. Nilsson.¹⁶ It was acquired in Italy, is now in a private collection in Oslo, and is here reproduced in profile view (Plate 23 a). The stylistic affinity with the coin of 19 B.C. seems to me very clear, though perhaps the resemblance to a yet earlier coin issued while Augustus was still Octavianus (Plate 23 b) may seem even closer. These heads are eloquent testimony for an early-Augustan style of portraiture far removed from the Polykleitanising and classic-ideal style of the famous Prima Porta statute in the Vatican or the well-known Augustus head in Boston; but they are in no way discordant with the Vergil! It should not therefore be a matter of surprise that the Oslo Augustus wears the same distinctive hair-dress as the Vergil,¹⁷ even though the finely chiselled rendering of the strands seems more like silversmith's than sculptor's work on the Oslo head. The true Vergilian manner of larger and more loosely separated strands reappears, however, on another portrait of Augustus, one of the "busti degli imperatori" in the Capitoline Museum, here reproduced (Plate 22, left) by the courtesy of the German Archaeological Institute in Rome from their great collection of negatives. Because the intimate stylistic correspondence here is not with empty classicising versions of the Vergil, such as that in Dresden, nor with otherwise impressive but cold and formal copies such as those in Copenhagen and in Dumbarton Oaks in Washington (the famous Corneto copy long in the possession of Mrs. Brandegees near Boston), but with the herm in the Boston Museum of Fine Arts from Torre Annunziata, I am convinced that this latter has not even the Seminario Patriarcale head in Venice to dispute its place as the foremost of all the extant Vergil heads, by being the most faithful to the archetype. For this reason I republish it on Plate 22 by courtesy of the Museum of Fine Arts in Boston, from their finest negatives. The right cheek, neck, and hair have suffered serious abrasion; but otherwise the idiom of late-Hellenistic Augustan art of the 20's B.C. shines out in all its Greek subtleness and sensitivity. It is, of course, of much finer workmanship than the Capitoline Augustus, which is far from a first-rate copy. Yet poet and patron, Vergil and Augustus, belong together here in art as they consorted together in life at the time when the originals of these two portraits were made.

III

In volume XVIII of the *Memoirs of the American Academy in Rome* for 1941¹⁸ I ventured to suggest that one of the three so-called Spectators on the Villa Medici relief from the *Ara Pietatis Augustae*, dedicated by Claudius in A.D. 42, was intended

¹⁶ ΔΡΑΓΜΑ, Acts of the Swedish Roman Institute, Second Series, Vol. I, Lund, 1939, pp. 288-296 and figs. 1, 2, 4, 5.

¹⁷ *Ibid.*, figs. 2 and 4 on pp. 292 and 295.

¹⁸ Pp. 100 f., pls. 31-32.

for Vergil, perhaps in the company of Propertius and Horace, and in that case was derived (as the strongly individualised features tempted me to think) from the same original contemporary portrait responsible for all our copies of the Vergil head. But at the time of publication I had only Petersen's old negatives (which were still fortunately on file in the German Archaeological Institute) from which to illustrate the Villa Medici relief; and these had not merely been taken years ago and had accumulated injuries (such as the large thumb-print across the face of "Horace"), but had perforce been made from the heavily sooted, begrimed, and uncleaned marble slab high up on the garden façade of the building.

Through the good offices of the Museo di Roma and the intercession of Prof. Frank Brown of the American Academy, I am now able to substitute a new and recent photograph (Plate 23 c) from the carefully cleaned relief. I hope that others will agree with me that the resemblance to the Vergil head has been increased rather than diminished, and that this almost providentially preserved and accurately dateable version deserves to be enshrined among our *Vergiliana*. The relief-maker has copied the distinctive horizontal brushing of the hair appropriate to the right profile, but (rather like some of the Augustan coin-engravers who reversed profiles) has transferred the distinctive parting to the hither side of the head, since it could not otherwise have been shown in the relief. The invalid throat has been carefully indicated. And the close agreement of the drapery with the small portion of it which appears on the Venice Vergil (Plate 19 b) brings new confirmation to Crome's argument that the Head has there been shown in Roman tunic and toga—as one would surely expect for Vergil but would be in some embarrassment to explain for Menander!

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EXCAVATIONS IN THE ATHENIAN AGORA: 1950

(PLATES 24-30)

FIELD work carried out during the first six months of 1950 constituted the fifteenth campaign of excavation devoted by the American School of Classical Studies to the exploration of the Athenian Agora. The project, begun in 1931, has now passed its twentieth year, but of these four lustra one was made fallow by World War II.

In 1950, as in the previous year, a large proportion of the whole effort went to the exploration and study of the Stoa of Attalos and its immediate environs with a view to the reconstruction of the building for use as an Agora museum. This preparatory work has now been completed. An interesting by-product of the work on the Stoa of Attalos was the elucidation of the scheme of a small colonnade, the North-east Stoa, that closed the eastern part of the north side of the Agora square. The removal of a maze of house foundations of the Byzantine and Turkish periods in the north central part of the Agora brought to light the altar of Ares and, incidentally, yielded a number of interesting marbles both inscribed and sculptured. A beginning was made on the systematic conservation of the ancient buildings in the area, starting with the Tholos, the Civic Offices, and the Odeion.

Field work in and around the Stoa of Attalos was supervised by Mr. Eugene Vanderpool, assisted for a time by Miss Evelyn B. Harrison, while the clearing of the north central area was in charge of Mr. Gerald J. Sullivan and Miss Margaret Crosby. Miss Lucy Talcott has continued to be responsible for the records and the museum; in this department she now enjoys the assistance of Miss Barbara Philippaki who comes fresh from her studies under Professor Beazley at Oxford and whose book on the Attic stamnos is soon to appear. Miss Alison Frantz has again filled all our photographic needs and Mr. John Travlos has devoted his whole time to our architectural problems. Miss Marian Welker has produced many drawings and water colors of vases, lamps, and architectural details. Miss Giulia Hitsanides, a grand-niece of Professor Gorham P. Stevens and a recent graduate from the School of Architecture in the Athenian Polytechnion, has also been of great help in this department.

In addition to the field work with which the present report is largely concerned, good progress has been made in the course of the year on the study of various groups of material. Thus Eugene Vanderpool, working in close correspondence with Professor A. E. Raubitschek of Princeton University, has been systematically digesting the collection of ostraka that now numbers well over 1500. Miss Lucy Talcott, in the little time left to her by the demands of colleagues, has resumed her study of Red-Figure. Miss Margaret Crosby, having completed her publication of the silver-mine

leases, has turned to the study of the lead tokens in the Agora collection which now numbers several hundred pieces ranging in date from the 4th century B.C. into the late Roman period. The stamped designs which they bear, usually of fine quality, are full of mythological and religious interest.

Miss Virginia Grace has almost completed the reading and preliminary classification of the stamped wine jars in the Agora and has besides found time to work over the collections in the Athenian Kerameikos and in the Epigraphic Museum in Athens, and to record recent finds on Rhodes, Cyprus, Thasos, and at Corinth. She has, moreover, arrived at an understanding with the authorities of the French School whereby the resources of the Agora may be pooled with those from the French excavations on Delos and Thasos and produced in corpus form with much greater economy and authority than would be possible in separate publications of the individual sites. In the Agora museum Miss Grace has set out a series of some 300 wine jars arranged both by date and by place of origin: an illuminating documentation of an important branch of ancient commerce.

Mr. G. Roger Edwards has completed his survey of the Hellenistic pottery on the Agora shelves, some 4000 vases, and has seen to the making of the necessary photographs and drawings. Mr. Richard H. Howland, Chairman of the Department of Fine Arts in Johns Hopkins University, resumed his connection with the Agora for the second half of the calendar year with the object of preparing for publication his study of the Agora lamps which now number over 4700.

Before their departure in the late summer, Miss Evelyn Harrison had completed the groundwork for her study of some fifty sculptured portraits in the Agora and Mrs. Evelyn Lord Smithson had done the same for a significant series of groups of Protogeometric pottery recovered from wells. Miss Anna Benjamin has performed a difficult but useful service by completing an index of the many hundreds of graffiti and dipinti on pottery, thus making this intriguing material accessible.

In the course of a summer visit, Mrs. T. L. Shear renewed direct contact with the Agora coins on the study of which she has been working steadily with the help of the card catalogue now in Princeton. Another summer visitor, Miss Lucy T. Shoe, made a close study of the many poros fragments from the Stoa Poikile with a view to their publication.

Among others who continue to work on Agora material though at a distance are Professor B. D. Meritt (inscriptions), Gladys Davidson Weinberg (glass), and Dorothy Burr Thompson (terracotta figurines).

The long series of well documented skeletal material produced by the Agora Excavations is being made to yield the utmost in anthropological data by Dr. J. Lawrence Angel of the Daniel Baugh Institute of Anatomy in the Jefferson Medical College, Philadelphia. In the summer of 1949, Dr. Angel brought his records up to date by examining all the material that had come out since his last previous profes-

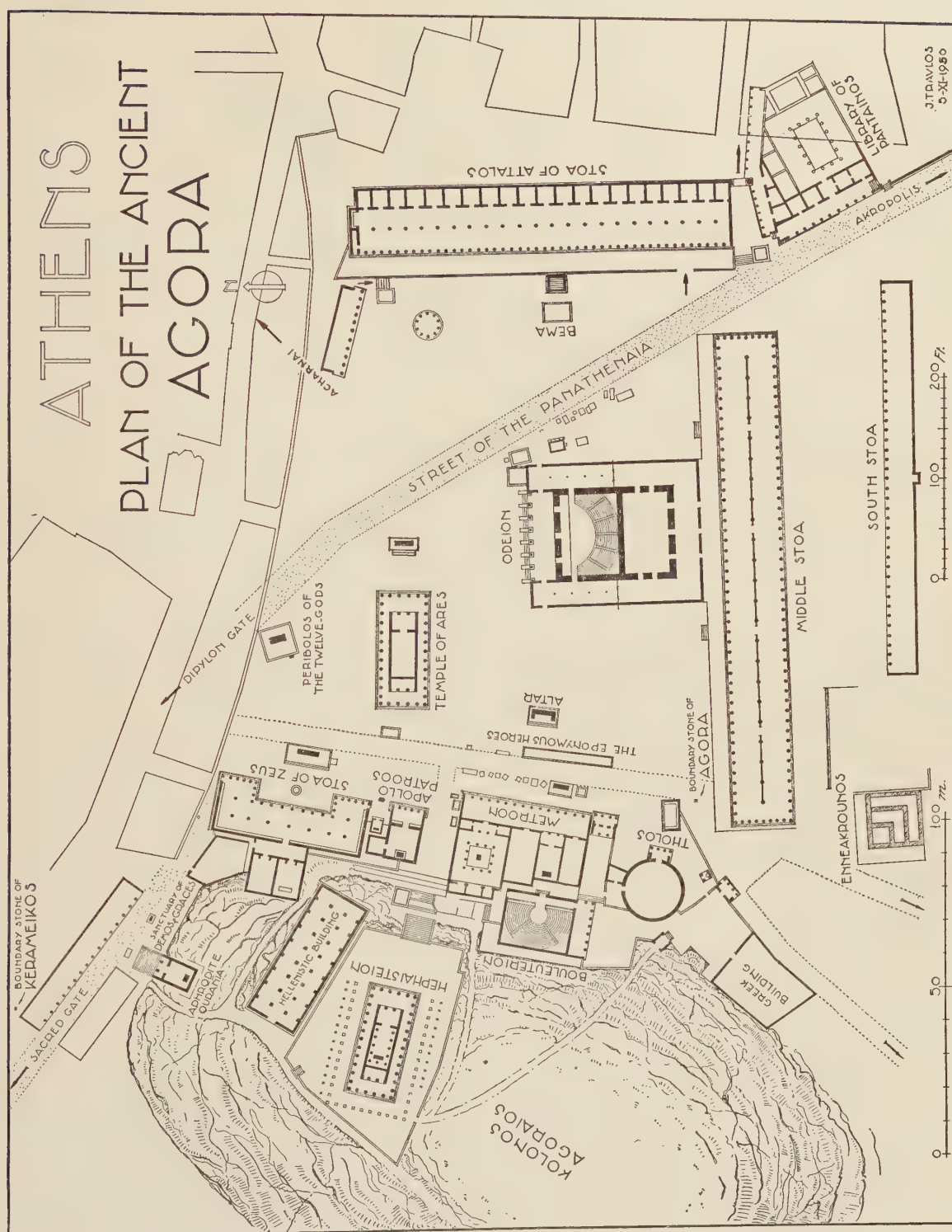


Fig. 1. The Agora in the Second Century after Christ

sional visit before the War. During the year under review the teeth and jaws of these skeletons have been subjected to X-ray examination by Dr. George Philippas, a practising dentist of Athens with American training. Dr. Philippas has extracted much valuable information on the general trends in dental hygiene among his fellow townsmen over a period of 3500 years and many interesting sidelights on their individual miseries.

This year, as last, the undertaking has been greatly advanced by the collaboration of scholars holding United States Government grants under the Fulbright Act. In the first half of the calendar year the following scholars holding such grants participated in the work of the Agora: Misses Lucy Talcott, Margaret Crosby, Marian Welker, Virginia Grace, and Mr. G. Roger Edwards, all Research Scholars; and Miss Anna Benjamin, Miss Evelyn B. Harrison, Mrs. Evelyn L. Smithson, and Mr. Gerald J. Sullivan as Graduate Scholars. In the second half of the calendar year Mr. Howland held a half-year Research Scholarship.

For the academic year 1950-51, Misses Talcott, Crosby, Frantz, and Grace hold research fellowships from the School. We are greatly indebted to Miss Frantz for the benefit of her professional services given on a purely voluntary basis during the half year that intervened between the termination of her duties as Cultural Attaché and her formal return to membership in the School.

The skilled Greek technical staff has continued to give its essential support to the scholarly endeavor under the genial direction of our Chief Foreman, Mr. Sophokles Lekkas, who has served in this capacity throughout the first twenty years of the undertaking and who now, having recovered from a serious operation, courageously looks forward to another such term.

It is a pleasure once more to record the ever ready support and the lively interest shown by the authorities of the School even in a year beset with other problems.

It is equally pleasant to acknowledge our standing debt to our hosts, the authorities of the Greek Archaeological Service: to its head, Professor A. Orlandos, to the ephors, Messrs. N. Kotzias and J. Threpsiades, and to Mr. and Mrs. Karouzo of the National Museum for so helpfully facilitating the study of comparative material in their keeping.

Most welcome financial assistance has again been received from Mr. John Crosby, Mrs. Lyndon M. King, and various members of the staff.

CONSERVATION OF BUILDINGS

Most of the ancient buildings of the Agora have come to light in a more ruinous state than those of any other major site in Greece. In order to preserve the little that remains of walls and floors and to make the scheme of the buildings intelligible to the visitor, much careful conservation will be required. This year a beginning was made on systematic attention to buildings of which the study had been previously

completed, viz., the Tholos, Civic Offices, and Odeion. In each case gaps in the foundations have been made good, exploratory pits have been refilled and holes in floors have been closed with crushed stone. The necessary building material has been drawn from the vast number of nondescript and non-attributable ancient blocks which had previously cluttered the excavations.

Another incidental gain from such measures is the greater ease with which weeds can be controlled; still another is the clarity with which the buildings thus treated can now be distinguished whether from the neighboring hill-tops or from the air.

STOA OF ATTALOS — AGORA MUSEUM

As reported in the account of last season's work,¹ it is hoped that the Stoa of Attalos may be rebuilt to serve as a permanent Agora Museum. The project, having been included in the program for the rehabilitation of archaeological areas and museums in Greece, continued to receive financial support under the Marshall Plan and hence the work was carried out by the School on behalf of the Greek Government under the general oversight of Professor A. Orlandos as head of the Departments of Antiquities and of Restorations in the Ministry of Education. We are deeply indebted to Professor Orlandos for his patient collaboration in working out the involved administrative and technical problems.

Within the year the preparatory work on the Stoa was completed. The last of the extraneous blocks were cleared away from within the limits of the building and its terrace (Pl. 24 a). In order to make room for those removed from the south end of the Stoa a mass of late accumulation was cut away between the Stoa of Attalos and the Middle Stoa, thus exposing a 30-metre length of the Panathenaic Way and the southeastern exit from the main square. The retaining wall necessary to support the modern north-to-south street to the east of the Stoa has been carried up to a safe height and the long narrow area immediately behind the Stoa has been carefully explored.

The series of three large earlier buildings previously reported beneath the Stoa has been more thoroughly examined and much new evidence has been gathered for their dates and plans. Deep digging beneath the north end of the Stoa terrace revealed the circular poros bedding (1.35 m. in diameter) for a small monument, presumably an altar, that was carefully fenced with a ring of leaded posts (Pl. 24 b). Dating from the late archaic period, the base had already been overlaid by a building before the end of the fifth century B.C. No clue has yet been found to the identification of this intriguing and, in view of its position, certainly important monument.

The new archaeological survey of the Stoa proper, made both possible and imperative by the discovery of so much new material in the clearing of the site, has yielded solutions to many of the outstanding problems in the recovery of the design

¹ *Hesperia*, XIX, 1950, pp. 316 ff.

of the building; a few of the results may be noted here. The removal of a little late masonry has revealed the original top of the shop-front wall over a 6-metre stretch near its south end; a series of dressed beddings on the wall top gives the precise spacing and slope of the rafters. A more satisfactory solution has been found for the restoration of the stairways leading to the upper story; they appear to have been over most of their length open to the sky, and to have been roofed only in their upper part. All the elements have now been recovered for the restoration of the upper front order, including the parapet between its columns. It is now apparent that in the Roman period mezzanine floors were inserted in many of the shops of the lower story. At the extreme south end of the terrace in front of the Stoa are clear traces of a fountain house that formed part of the original design, while behind the south end of the Stoa are remains of a public latrine of Roman date.

As a basis for the actual reconstruction of the Stoa, a technical survey was carried out during the summer and autumn of 1950 by Mr. George Biris, a Greek civil engineer with abundant experience in the construction of large public buildings in Athens. A whole folio of working drawings is now at hand together with the detailed calculations for both the construction and the cost. The drawings on which the survey is based are the work of Mr. John Travlos who has throughout collaborated closely with Mr. Biris.

The careful clearing of bedrock in the long narrow area immediately behind the Stoa has been remarkably fruitful. In addition to the foundations of various buildings exposed both in 1949 and 1950, five wells have been cleared this season: two of the late Geometric period, one of the mid 6th century, one of the late archaic period and one of the early Roman. The finest single object from these wells, a black-figured Siana cup of *ca.* 570 B.C., will be published shortly in a separate article in this journal by its finder, Eugene Vanderpool.

Of no little interest, however, is the wine jug of Pl. 25 a, which was found broken but complete in the late archaic well.² The shape can be paralleled in other Agora deposits of the early 5th century.³ Tightly wedged in the mouth of the jug was its stopper, neatly cut from cork; a small vertical hole in its middle was intended, no doubt, for a knotted cord to facilitate removal. It would appear that the jug had been lowered into the well in a complete state, presumably to cool its contents; then either the cord broke or the vessel was shattered in striking against the side of the shaft.⁴ Pausanias (VIII, 12, 1) reported cork oaks in Arcadia, and the use of cork for net floats is well attested by literary sources from the 5th century onward⁵ while the comic poet Alexis (*fl. ca.* 344-288 B.C.) prescribed its insertion in the soles of courtesans who needed a

² Inv. P20786. Height, 0.282 m. Diameter, 0.246 m.

³ Cf. *Hesperia*, VIII, 1939, p. 231, fig. 27: from a well beneath the Tholos.

⁴ Cato (*Res Rustica*, CXX) recommended as a means for keeping grape juice sweet for a year that it be placed in an amphora, stoppered with cork and pitch, lowered into a pool, left for 30 days, and then removed. Our cork, however, showed no trace of pitch.

⁵ Cf. Frazer's note on Pausanias VIII, 12, 1.

little extra height.⁶ Its employment in stopping wine bottles was perfectly familiar to Horace⁷ but our well would seem to have preserved the earliest known record of its use for this purpose.⁸

The terracotta lamp shown in Pl. 25 b will serve as a sample of the large group of pottery recovered from the well of early Roman date.⁹ This article came out quite intact, even to the charred wick of twisted fabric. We may surmise that it slipped from the hand of someone who had gone to draw water by night and that it was preserved by plunging into the deep water. The lamp is of non-Attic, probable Italian manufacture. Its top is enlivened by pictures of an olive spray and a pitcher: the ultimate and the immediate sources of the lamp's fuel.

This same well yielded a large number of cattle bones and horns. Since similar deposits have been found in other wells and pits of both the Greek and the Roman period along the east edge of the market square, we may infer that there were slaughter houses or butcher shops in the area.

A rubbish pit immediately behind the Stoa and toward its south end produced, along with a mass of broken pottery of the second half of the 5th century B.C., three small terracotta plaques, all intact and all remarkably fresh (Pl. 25 c).¹⁰ One of the plaques has a straight top line, a jagged bottom. On one side it has the word "Halimous" painted in black glaze, on the reverse the three letters LEO, clearly an abbreviation for the tribal name "Leontis." The other two pieces are complements to the first; on them it is the upper edge that is irregular though finished, and they are clearly, therefore, the corresponding lower halves of two pieces similar to our first. On the obverse both have the letters POL (?); on the reverse one has Leo(ntis), the other Ere(chtheis).

In 1878 another example of this same series had come to light in the excavations of the Greek Archaeological Society at the Dipylon.¹¹ In shape it resembles our first piece, i. e., it has an irregular lower edge, but it has a small hole at its middle. On one face it bears the painted inscription "Xypetaion." No lettering was recorded by its editor on the reverse, although we may now assume that it bore the appropriate tribal name: Kek(ropis), the paint of which may well have flaked.

We may reconstruct the procedure as follows. A clay plaque of the size of a domino was carefully shaped. On one side a demotic or a deme name was painted

⁶ Kock, *Com. Att. Frag.*, No. 98.

⁷ *Odes*, I, 20, 3; III, 8, 10.

⁸ Miss Virginia Grace draws my attention to the discovery of cork in amphora necks apparently of early Roman date found in southern France: S. Gagniere, *Cahiers d'Histoire et d'Archéologie*, Nîmes, XI, 1948, pp. 113 ff.

⁹ Inv. L4704. Length, 0.12 m. Width, 0.075 m.

¹⁰ Inv. MC 820-822. Thickness, 0.008 m. Width and length, 0.03 m.

¹¹ Koumanoudes, *Ἀθήναιον*, VIII, 1879, p. 237, No. 6; *I.G.*, I², 916. The piece is presumably in the National Museum but is at present inaccessible.

across the top and the letters Pol(?) across the bottom (the latter, however, is not necessarily a constant; other abbreviations may have appeared). On the other side the abbreviation of a tribal name was written across the middle. Then, before the plaque was fired, it was cut neatly in two across the middle in an irregularly wavy or toothed line which passed through the tribal name on the back leaving the upper parts of the letters on one-half of the plaque, the lower parts on the other. Firing followed.

We are dealing then with tallies or *symbola*, little plaques cut in half along an irregular line in such a way that any given half would join only its original mate and no other. They could thus be used for purposes of identification and recognition, each of two parties holding one of the halves. The presence of tribal and demotic names leaves no doubt that they are official rather than private *symbola*. This is suggested also by the close similarity between their fabric and that of contemporary official measures. The evidence of context and of letter forms indicates a date near the middle of the 5th century B.C.

Exactly how our *symbola* were used we can only conjecture at present, but it seems clear that they must have played some part in the official business transacted between the tribes and their member demes. They are not to be connected with the *symbola* employed in the law courts (Aristotle, *Constitution of Athens*, 65, 2 and 68, 2) nor does it seem likely that they could have been used in any way for allotment purposes. Whatever their exact use, they may be regarded as a new series of objects illustrating the mechanics of Athenian Government to be added to the already impressive lot discovered in the course of the Agora excavations.¹²

In the season of 1949 a Mycenaean burial was encountered behind the Stoa near its mid part.¹³ In 1950 at a distance of a few yards another burial of quite a different sort came to light (Pl. 26 a). There remained the lower part of a round pit sunk in the soft bedrock, its walls and floor carefully lined with brown clay. On the floor lay the skeleton of a dog, head to the west, with a large beef bone close by the nose. A miniature squat lekythos which was found at a slightly higher level may or may not belong with the burial; in any case it fixes the date within the 4th century B.C. This evidence of tender regard for a pet animal may be added to the frequent appearance of house dogs on sculptured gravestones of the period and to the epigrams from the graves of dogs.¹⁴

¹² I have drawn this basic description from the original account by Eugene Vanderpool. Several ingenious explanations of their purpose have already been propounded and others will no doubt be forthcoming.

¹³ *Hesperia*, XIX, 1950, p. 326.

¹⁴ *Anth. Pal.*, VII, 211. Clarke, Bacon and Koldewey, *Investigations at Assos*, Cambridge, Mass., 1902-21, p. 290 and p. 293, fig. 5, shows a gravestone found at Mytilene, now in Constantinople, carved with a figure of a dog and a metrical inscription of the Roman period. Miss Machteld Mellink has drawn my attention to a parallel for our burial in a cemetery of the Al'Ubaid period (early 4th millennium B. C.) at Eridu in Mesopotamia: a grave lined with sun-dried brick contained the skeleton of a boy, and above it the skeleton of a dog, probably of Saluki type, with a

Of the many small objects found in the exploration of the earlier buildings beneath the Stoa of Attalos, two terracottas may be mentioned. The first¹⁵ comes from the construction filling of the great square peristyle, a context of the second half of the 4th century B.C.¹⁶ A mould, from which the modern cast illustrated in Pl. 26 b was taken, preserves the upper part of a figure clad in tunic and Phrygian cap, hence probably Attis. On the analogy of better preserved examples, he may be restored in the act of genuflection beside an altar on which he has thrown himself either in exhaustion after an ecstatic dance or in supplication. The type is widespread and was in favor in the middle of the 4th century as shown by the discovery of several examples among the houses of Olynthos. The Agora piece is remarkable for the delicate modelling of the head which has a sculptural quality akin to that of the Mausoleion Frieze and the Alexander Sarcophagus.¹⁷

The second terracotta is also preserved in the shape of a mould which formed part of the floor packing of the immediate predecessor of the Stoa of Attalos, a market building to be dated in the second quarter of the 2nd century B.C.¹⁸ There remains but a single corner of a large plaque, on it the legs of a figure moving swiftly to the left (Pl. 26 c).¹⁹ The agitated, carefully patterned drapery stands in much the same derivative relationship to Athenian work of the late Periclean period as does that of the great frieze on the Altar of Pergamon, with which our piece is, no doubt, closely contemporary. The fragmentary state of the Agora plaque is in some measure compensated for by the chronological value of its context.

Beneath the floor of the Stoa in front of the eighth shop from the south lay a fragmentary boundary stone inscribed Δ]HMHTPO[Ξ] HOPOΞ in lettering of the first half of the 5th century (Inv. I 6311). Although the stone was not found *in situ*, it is so paltry a scrap that it is not likely to have been carried far for re-use; this raises a tantalizing problem as to the site of the sanctuary.

THE NORTHEAST STOA

The examination of the northern part of the retaining wall of the Stoa of Attalos led to the further clearance of a small building which had been partially exposed in

meat bone at its mouth (*Illustrated London News*, Sept. 11, 1948, p. 304, fig. 8). On the west slope of the Areopagus, among the ruins of houses and shops, was found a terracotta jar containing the skeleton of a small dog together with an unguentarium of the late Hellenistic period; this will be published shortly by Rodney S. Young. Cf. also Theophrastos, *Characters*, XXI, 36.

¹⁵ Inv. T 3044, Height, 0.068 m.

¹⁶ *Hesperia*, XIX, 1950, pp. 320 ff.

¹⁷ F. Winter, *Die Typen der figürlichen Terrakotten*, Berlin and Stuttgart, 1903, p. 158, Nos. 6-8; D. M. Robinson, *Olynthos*, IV, 1931, Nos. 340, 341; VII, 1933, No. 388. I owe the references to my wife.

¹⁸ *Hesperia*, XIX, 1950, p. 320.

¹⁹ Inv. T 3045. Height 0.31 m. Width 0.28 m. The full height of the figure may be estimated as *ca.* 0.65 m.

1938 at the extreme northeast corner of the market square.²⁰ Most of the structure falls within the width of the trench cut for the Athens—Peiraeus Railway in 1891 but measured sketches made by German scholars at that time and now preserved in the German Archaeological Institute in Athens, when studied in conjunction with the foundations now exposed, allow its scheme and dimensions to be fixed. The structure was a stoa measuring overall *ca.* 26.60 x 7 m. It faced south across the square and presumably bordered the important thoroughfare that swept along the north edge of the square. In function, scale, and date the new building is comparable with the colonnade discovered in 1936 along the north side of the westward continuation of the same road outside the northwest corner of the square;²¹ the new building, however, is Ionic, the other Doric. For lack of an ancient name we may designate the structure the Northeast Stoa.

The foundation for the row of columns that formed the south front of the stoa is visible in its full length immediately to the south of the railway retaining wall (Pl. 27 c). Toward its east end there remains in place part of the lowest of three steps of Hymettian marble. Numerous fragments from the superstructure lay in the plundered foundation trench and on the floor of the building; though small, they are helpful (Pl. 27 b). The column shafts were of greenish white marble of Karystos, unfluted. The Ionic capitals, of Pentelic marble, are clearly patterned on those of the Erechtheion; bands of bead and reel encircle the cushion; the eyes of the volutes are flat. Between shaft and capital there intervened a richly carved drum, again as in the Erechtheion. A tiny fragment from the volute of a corner capital found at the southeast corner of the building indicates a *prostyle* rather than *in antis* arrangement. Scraps remain of the architrave, of dentils, of a marble antefix and one small piece most likely from the coffered soffit of the cornice. Several pieces of carved marble revetment suggest that the interior was richly finished. The surviving step blocks indicate a column spacing in the neighborhood of 2.50 m. which would be consonant with the scale of the superstructure and would call for 11 columns.

Little evidence is yet available for the date of construction. Similarity with the Temple of Rome and Augustus on the Acropolis (*ca.* 27-18 B.C.) in point of technique and stylistic dependence and the sparing use of gray, lime mortar for pointing the interior joints in the foundations of the Agora building would suggest a date in the early Roman period. The lavish use of marble, in striking contrast to the frugal construction of the colonnade bordering the road to the Sacred Gate, may imply that the building was a gift to the City.²² Our stoa was certainly destroyed by fire, in all likelihood in A.D. 267, and was never rebuilt.

²⁰ *Hesperia*, VIII, 1939, p. 213.

²¹ *Hesperia*, VI, 1937, p. 339; IX, 1940, p. 299.

²² It appears to be too late in date to rank as a candidate for identification with the "Stoa of the Roman" of *I.G.*, II², 958, 29 (mid 2nd century B.C.).

The southeast corner of the Northeast Stoa is separated by an interval of only 2.65 m. from the retaining wall of the Stoa of Attalos. This was no doubt a useful entrance for pedestrians at the extreme northeast corner of the square, and the deep accumulation of successive layers of hard tramped gravel shows that it was so used for centuries. We should have expected, however, a wider passage at this critical point. The explanation may be that the Northeast Stoa, which could scarcely have been shortened without becoming insignificant in scale, was thrust eastward as far as possible in order that its west end might not block another entrance to the square, viz., the thoroughfare that brought one in from the northeast, through the Acharnian Gate and past the little sanctuary of Zeus Phratrios and Athena Phratria discovered in 1937.²³

It was perhaps at the time of erection of the Northeast Stoa that provision was made for more convenient access to the north end of the terrace of the Attalos Stoa. A large rectangular monument which had previously risen immediately in front of the terrace wall of the Stoa was now shifted westward leaving room for a stairway between monument and terrace wall; the first step remains in place. This was a measure of very real convenience to those coming from the north and wishing to visit the Stoa of Attalos, for the clearing of the past season has brought to light what would seem to have been the only original entrance to the Stoa: an opening in the parapet of its terrace close to the south end of the building.

The more precise determination of the scheme of the Northeast Stoa has implications also for the topography of the northwest corner of the Agora. It will be observed on the plan (Fig. 1) that the line of the back of the stoa if projected westward just skirts the northeast corner of the Peribolos of the Twelve Gods and the north end of the Stoa of Zeus. This line would appear to represent the southern edge of the thoroughfare that bordered the north side of the square and that then continued on a very natural course between Kolonos Agoraios and the Sanctuary of Demos and the Graces on the south, the narrow Augustan stoa on the north toward the Sacred Gate and perhaps also the Dipylon. This considerably increases the likelihood that the building designated on the plan as the Stoa of Zeus was actually the northern-most building on the west side of the square and hence that it was known as the Royal Stoa as well as the Stoa of Zeus.²⁴

These considerations have little effect on the hypothetical placing of the Stoa Poikile previously proposed.²⁵ It still seems probable that this building, facing south,

²³ *Hesperia*, VII, 1938, p. 614. Cf. the plan of the Agora and its environs in *Hesperia*, Supplement VIII, 1949, p. 386; a revision of this plan will appear shortly in a regular number of *Hesperia* in an article by Rodney S. Young.

²⁴ On the vexed problem of the identification of the stoas see most recently E. Vanderpool, *Hesperia*, XVIII, 1949, p. 128. It is possible that some considerable modification of the road system between the Agora and the Dipylon occurred in the rebuilding after the Roman sack of 86 B.C. which was particularly destructive in this area.

²⁵ *Hesperia*, XIX, 1950, pp. 327 ff.

bordered the north side of the thoroughfare that ran across the north edge of the square. Its eastern termination, like the western termination of the Northeast Stoa, was presumably fixed by the road coming in from the Acharnian Gate.

THE ALTAR OF ARES

In furtherance of the systematic program for finishing the exploration of areas that had been summarily opened up between the Wars, a tangle of late house foundations was removed this year from the area north of the Odeion and to the east of the Temple of Ares (Pl. 28).²⁶ The field work was supervised through most of the season by Mr. Gerald Sullivan, toward the end by Miss Margaret Crosby. Although the clearance of the area was by no means completed, the season's work made the Odeion and the Temple of Ares more intelligible to one on the spot, brought to light the Altar of Ares and another considerable stretch of the Panathenaic Way and produced some interesting marbles from the late walls.

The private houses in this area in their earliest form (11-12th century) were part of the thickly built Byzantine settlement that stretched across the whole northern part of the old Agora. The foundations showed evidence of repeated reconstruction and re-use from that period down to modern times. The houses were modest in scale and construction. They were provided with numerous wells and with storage facilities in the shape both of terracotta or masonry pithoi and of small vaulted chambers. Before removal, these remains were photographed, drawn, and studied; they will be included eventually in a comprehensive account of the Byzantine dwellings of the Agora region.

The Panathenaic Way as exposed in this area is a broad open roadway with a graveled surface torn by the torrents that swept down from the slopes of the Acropolis after the ancient drainage system had been disrupted by the barbarian sack of A.D. 267. That the road had not always followed exactly the same course is indicated by the appearance in the wall of a late pit, deep beneath the latest road surface, of a water channel very carefully made from massive poros blocks; the filling in the channel showed that it had already gone out of use in the latter part of the 5th century B.C.

The complete removal of the house foundations to the east of the Temple of Ares brought to light the whole of a rectangular foundation of large poros blocks, one corner of which had been revealed by the preliminary excavation (Pl. 29 a). The base measures 6.30 x 8.90 metres overall and falls on the axis of the Temple at a distance of 10 metres from the east front of the Temple. Two courses of poros blocks remain in place and the present top shows a carefully dressed bed for the euthynteria, presumably of marble. Although the present remains constitute a regular rectangle in

²⁶ On the preliminary excavation of the area cf. *Hesperia*, VI, 1937, p. 352; VII, 1938, pp. 318 f.; IX, 1940, p. 7.

outline, the blocks are laid in such a way as to show that the main part of the superstructure was supported by the eastern three-fifths of its width, while the remaining width to the west was occupied by steps, the length of which was less than that of the main part of the monument. A large though much battered orthostate of Pentelic marble that was found lying on the southeast corner of the foundation probably comes from the superstructure (Pl. 29 a). With it may be associated several fragments of richly carved moulding found in the area.

All the blocks of the foundation are clearly re-used. In the style of their original working as well as in the way in which they were set by their re-users, these blocks closely resemble the foundation material of the Temple of Ares which has been shown to date originally from the third quarter of the 5th century B.C. but to have been transplanted to the Agora in the time of Augustus.²⁷ This similarity, coupled with the axial placing of the newly cleared base, leaves no doubt that it is to be associated with the Temple. In size and plan the base would be thoroughly appropriate to a temple altar of the period of this Temple. Hence we need not hesitate to regard it as the base for the Altar of Ares.²⁸

On top of the altar foundations lay a bearded head of Pentelic marble slightly over one-half life size (Pl. 29 b, c).²⁹ That the head comes from a high relief is shown by the scar of contact near the top of its back and by marks of the drilling by means of which the neck and left side were cut free from the background. With this head, in all likelihood, is to be associated a draped female torso, likewise from a high relief, and similar in material, scale, and quality of workmanship (Pl. 30 d).³⁰ The torso was removed in 1937 from a late foundation a little to the east of the Altar. The figure has both hands forward but what they held is not clear nor is there any other clue to her identification.

The male head is perhaps a little, but only a little more developed in style than the bearded heads of the Panathenaic frieze. The female figure likewise is a trifle later than comparable figures on the Panathenaic frieze. On the other hand, she is indubitably earlier than the Caryatids of the Erechtheion or the Nike Temple Parapet. A more apposite comparison is with the little figures from the base of the cult statue of Nemesis at Rhamnous. These considerations point to a date in the 30's of the 5th century, the decade to which the Temple of Ares has been referred through an analysis of its architectural style.³¹ The first-rate quality of the newly found sculpture would also encourage one in associating it with the Temple. On the negative side,

²⁷ *Hesperia*, IX, 1940, pp. 47 ff.

²⁸ On the basis of the slight evidence provided by the preliminary excavation the altar was included by C. G. Yavis, *Greek Altars*, Saint Louis, 1949, among his "Altars of Undetermined Type, Group A, length 3 m. to 6.50 m." (p. 192).

²⁹ Inv. S 1459. Height, 0.14 m.

³⁰ Inv. S 1072. Height, 0.582 m.

³¹ Dinsmoor, *Hesperia*, IX, 1940, p. 47: 440-436 B.C.

there is no other building or monument of appropriate date within the general area to which the frieze might be attributed.

The scale of the sculpture raises a problem, for it is appreciably greater than that of either the metopes or the continuous friezes of the Hephaisteion, a sister temple of Ares and almost identical in size.³² Since, however our figures are of virtually the same scale as those of the Nike Temple Parapet,³³ and of the same salience, our relief would be appropriate for a balustrade.

May we then venture to suppose that our sculpture once adorned the outer face of a parapet enclosing three sides of the platform that supported the actual Altar of Ares? It must be admitted that, with so little of the altar left, there is little hope of establishing such a connection by direct evidence, yet the most characteristic feature of the altar's plan, viz., the fact that the steps stop short of the ends of the altar proper, would strongly favor just such a restoration.

If we accept the contention of one (and a very reasonable) school of thought that would have Ares' temple originally stand on Ares' hill, the need of a protecting parapet will be the more easily understood.³⁴ Placed thus our monument might well have inspired those who were commissioned a few years later to fence the top of Nike's bastion in full sight across the saddle between the two hills. And (if one more conjecture be permitted) may not the stir caused by the removal of temple and altar from the hilltop to the Agora, apparently to do honor to Augustus in or about the years 15-10 B.C., have influenced the design of the Ara Pacis, vowed in 13 B.C. and dedicated in 9 B.C. to commemorate Augustus' victorious return from Spain and Gaul, an altar distinguished by a marble screen richly carved in a style redolent of the ripe Periclean?

One more observation may be ventured on the placing of the altar in its second period. The plan (Fig. 1) will reveal that the altar falls not only on the main axis of the Temple of Ares but also on that of the Odeion; a dual relationship which must have impressed itself on anyone ascending the Panathenaic Way. This then will form one more link in the intimate connection that has been shown to exist between the two buildings in the recent studies of them: the temple brought in to the square to be rededicated, it seems, to Ares and Augustus, the concert hall erected by Agrippa, the son-in-law of Augustus and the father of Gaius Caesar who was himself addressed as the "New Ares."³⁵

Of several inscribed marbles recovered from the late foundation walls in the area of the altar the most interesting is perhaps the lower part of a stele bearing a

³² Height of Hephaisteion metopes, 0.828 m.; of continuous frieze, 0.808 m.

³³ Total height, 1.059 m.; height of sculpture field, 0.910 m. (Dinsmoor, *A.J.A.*, XXX, 1926, p. 9, fig. 4).

³⁴ This is my wife's observation.

³⁵ Dinsmoor, *Hesperia*, IX, 1940, pp. 49 ff.; Thompson, *Hesperia*, XIX, 1950, p. 97.

prytany decree to be dated apparently in the second quarter of the second century B.C.³⁶ The marble preserves 13 lines of the decree of the Boule, the full register of 50 names drawn from 12 demes of the tribe Hippothontis and 10 citations in honor of individual officials. Among many points of interest in the inscription is the mention of "the official in charge of secret documents."³⁷

Two sculptured marbles, likewise from the late house foundations to the east of the Temple of Ares and to the north of the Odeion, deserve mention, not because of any significant association with the area, but because of their own intrinsic interest. The first is the mid part of a life-sized kouros of island marble (Pl. 30 b, c).³⁸ Scars on either side show that the hands hung close by the thighs. The almost rectangular cross section of the trunk and the schematic rendering of surface detail would suggest a date near the middle of the 6th century B.C. so that the fragment even in its present piteous condition adds one more to the short list of life-sized male figures known from Athens itself in this period.³⁹

The other marble, though still more fragmentary, is also more significant (Pl. 30 d, e).⁴⁰ It is a remnant of a life-sized group of a man attacked from behind by a lion. Of the man there remains a little from the top of the head and the back of the neck. The hair over the skull is rendered by stippling on which are traces of red paint; the stippled surface was bordered at the back with two rows of snail-shell curls. The lion has fared no better; of him there is left to us one and a half claws, their points embedded in the man's skull. The outermost claw was cut separately and attached by means of a small bronze pin secured with cement. The puckered skin around the base of the claw proper is suggested by finely engraved lines. The workmanship, insofar as one may judge from so small a sample, is masterly. The marble is fine-grained, milky white, laminated in texture, akin to that of the Moschophoros. The use of such marble would suggest an early date. So, too, would the very close similarity in the rendering of the claws with the great poros lion and bull pediment of the Acropolis.⁴¹ A somewhat lower date is perhaps demanded by the treatment of the hair on the man's head which finds ready parallels in the neighborhood of 525 B.C.⁴² One might then hazard a date late in the third quarter of the 6th century.

³⁶ Inv. I 6295. This document is being studied for publication by Mr. Gerald Sullivan.

³⁷ Cf. *Hesperia*, XVII, 1948, p. 27.

³⁸ Inv. S 1440. Height, 0.285 m. Width, 0.345 m.

³⁹ The obvious comparisons are with the Tenea-Volomandra Group (ca. 575-550 B.C.) and the Melos Group (ca. 555-540 B.C.) of Miss Richter's *Kouroi*, New York, 1942.

⁴⁰ Inv. S 1449. Maximum dimension, 0.235 m.

⁴¹ H. Schrader, *Die archaische Marmorbildwerke der Akropolis*, Frankfurt, 1939, p. 387, fig. 499.

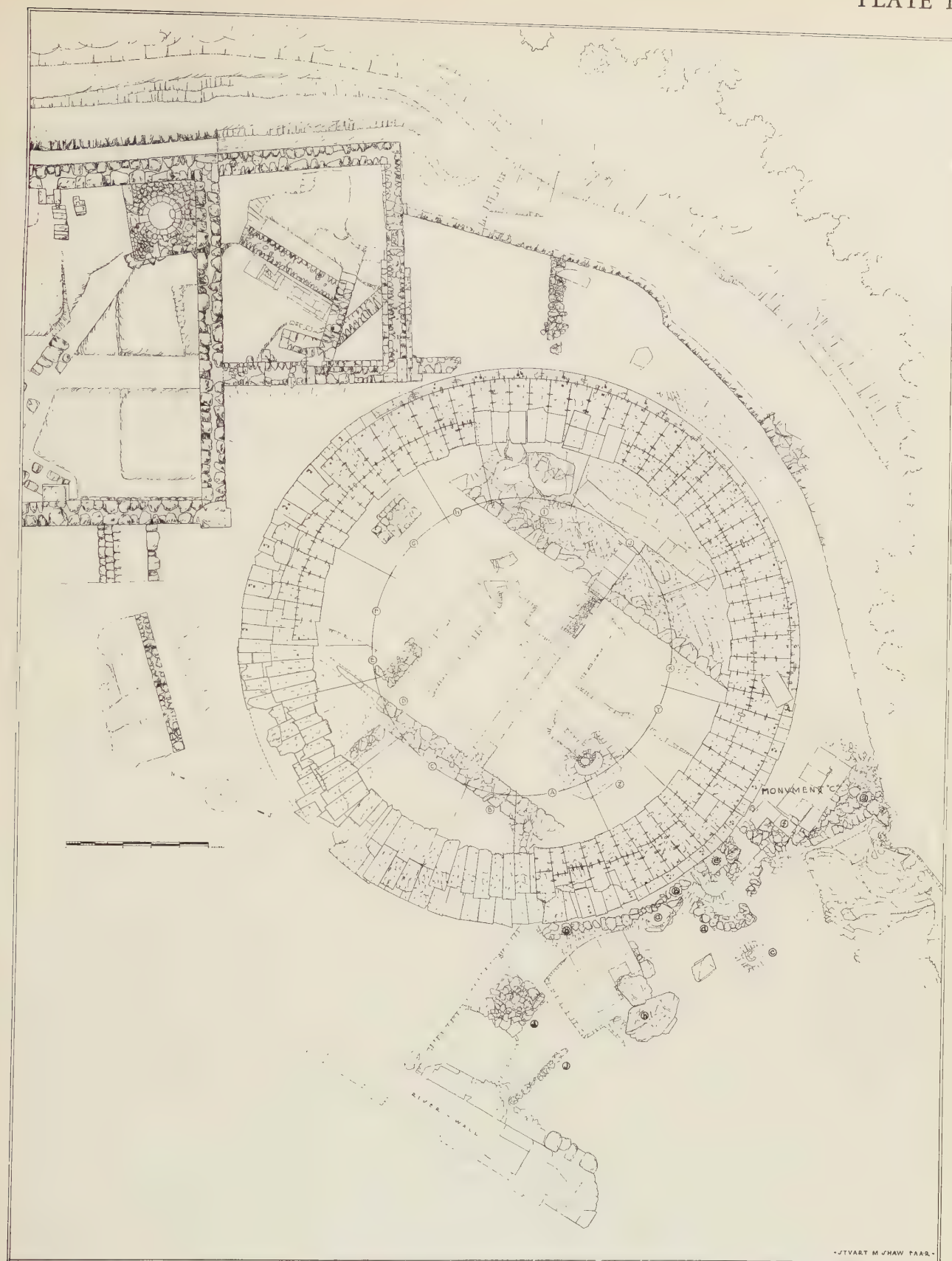
⁴² For the stippling cf. the Sabouroff head in Berlin (A. Furtwängler, *Die Sammlung Sabouroff*, Berlin, 1883-1887, pls. III, IV; C. Weickert, *Griechische Plastik*, Berlin, 1946, p. 27, fig. 13). The stippling and snail-shell curls in combination are found on the head in Boston: Caskey, *Museum of Fine Arts Bulletin*, XXXIV, 1936, pp. 6 f.; *A.J.A.*, XL, 1936, p. 307, figs. 1 A-C; Richter, *Kouroi*, No. 119.

The theme of our group was presumably a gigantomachy in which a giant was assailed by a feline attendant of one of the gods. One thinks in this period of the marble rendering of the subject in the front gable of the "Hekatompedon" on the Acropolis or of the poros version in the rear gable of the Alcmaeonid temple of Apollo at Delphi, while the specific incident is more nearly paralleled on the frieze of the Siphnian Treasury. The scale of our fragment is more appropriate to a pediment than to a frieze and its remarkably fresh condition might well be explained by the protection afforded by the raking cornice close above a group that would naturally have been thrust into an angle of the gable. Since there appears to be no place for our group in the known buildings or sculptural compositions of the Acropolis, we must search in the lower city for another of the great buildings of Peisistratid Athens.⁴³

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⁴³ It is perhaps conceivable that the poros lion's head found in 1946 near the altar of the Twelve Gods derives from the other (the rear) gable of the same building (*Hesperia*, XVI, 1947, p. 207, pl. XLIII). Several fragments of archaic poros architecture found in the northern part of the excavations must also be more carefully scrutinized in this connection.



Samothrace, Arsinoeion, Excavation 1949

KARL LEHMANN: SAMOTHRACE, FOURTH PRELIMINARY REPORT



a. The Excavation South of the Arsinoeion



b. Excavation outside Sections Z-A of the Arsinoeion



a. Excavation in front of Central Terrace



b. Sacred Rock outside Arsinoeion



a. Stepping Stone and Pavement at Sacred Rock



b. Altar West of Arsinoeion



c. Archaic Sacristy (South Foundation in foreground)



d. River Wall West of Arsinoeion



e. Fragmentary Terracotta Altar



f. Inscription at West Corner of Central Terrace



a. Bothros *e*, Foundation *f*, Cyclopean Wall and Rock Cliff



b. Corner *a* of archaic double precinct, Foundation *d*, and Terracotta Altar



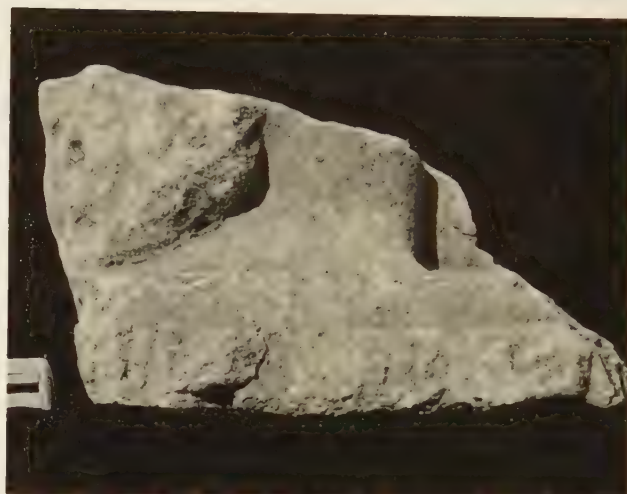
a. Black-glazed Kylix



b. Console (from Door of Arsinoeion?)



c. Late Roman Cooking Pot



d. Fragment of Coffin with Bust



e. Fragment of Sima of Arsinoeion



a. Section of Parapet of Arsinoeion



c. Capital of Ionic Building



b. West End of Central Terrace and Monument Terrace in front of it



d. Capital of Ionic Building



a. Frieze Block with Dancing Girls



b. Two Slabs with Dancing Girls, Musée du Louvre

KARL LEHMANN: SAMOTHRACE, FOURTH PRELIMINARY REPORT



a. Detail of Frieze Block with Dancing Girls



b. Fragment of Frieze Block with Dancing Girls



Detail of Frieze with Dancing Girls

KARL LEHMANN: SAMOTHRACE, FOURTH PRELIMINARY REPORT



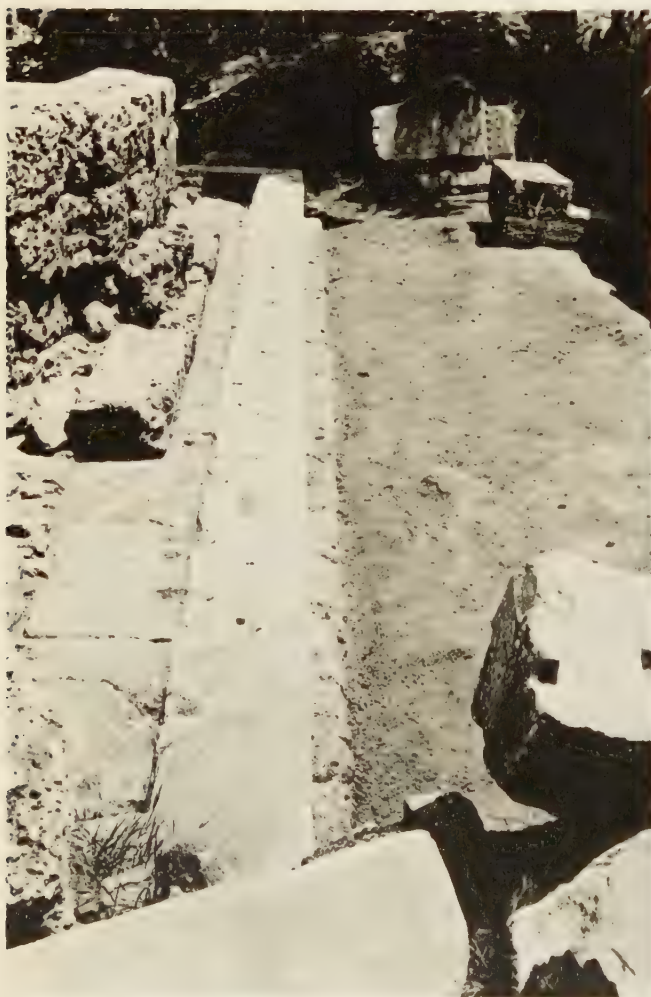
a. New Temple after Excavation



b. New Temple after Excavation



a. Southwest Corner of New Temple and Terrace Wall



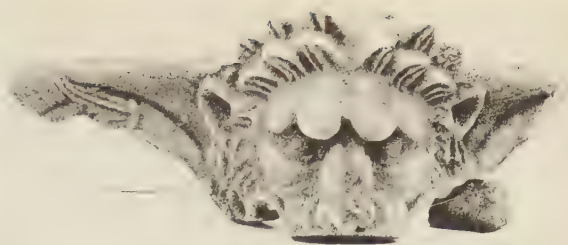
b. New Temple, Southern End



c. Early Apsidal Walls inside Apse of New Temple



a. New Temple, Bothros seen from South



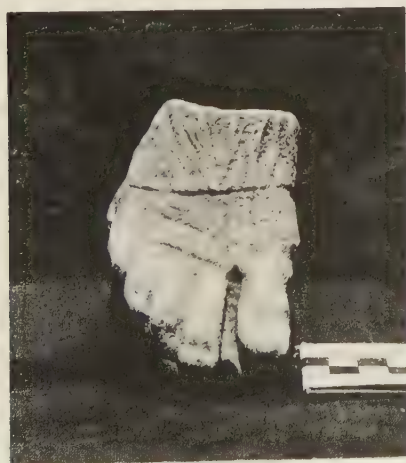
b. Sima Fragment from New Temple



c. Fragment of Rear Raking Sima of New Temple



d. Bench Support, Samothrace Museum



e. Female Foot from Pediment of New Temple



f. Pouring Stone in New Temple



a. Fragment of Left Corner Figure of New Temple Pediment



b. Sculptured Marble Fragment from New Temple



c. Detail of Frieze with Dancing Girls



Victory from New Temple

KARL LEHMANN: SAMOTHRACE, FOURTH PRELIMINARY REPORT



a. Victory from New Temple (right side)



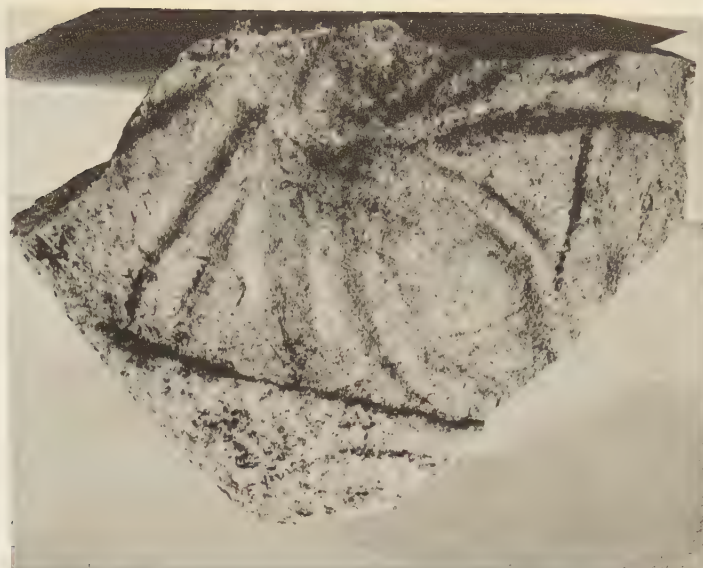
b. Victory from New Temple
(back)



c. Victory from New Temple (left side)



a. Late Antique Antefix of New Temple



b. Fragmentary "Imago Clipenta" from New Temple



c. Terracotta Antefix



d. Marble Antefix



e. Fragmentary Votive Relief, Marble



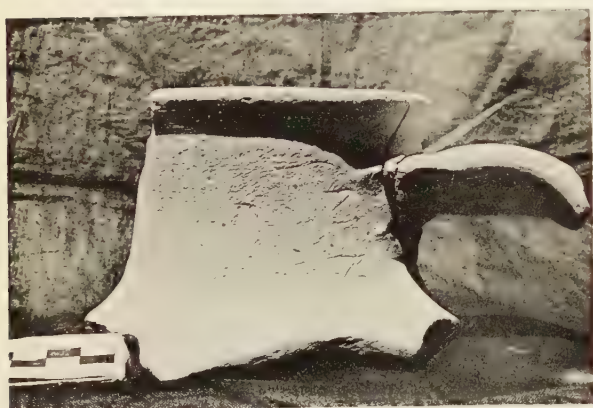
f. Part of Corner Capital of Ptolemaion



a. Fragment of Amphora
with Graffito



b. Fragment of Bowl with Graffito



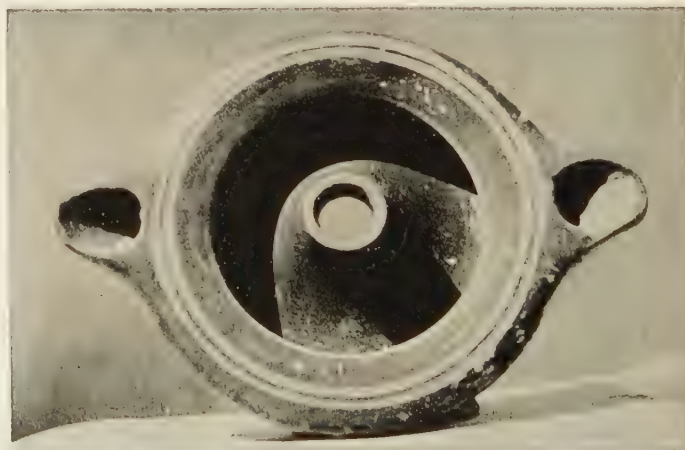
c. Fragment of Amphora with Graffito



d. Foot of Vase with Graffito



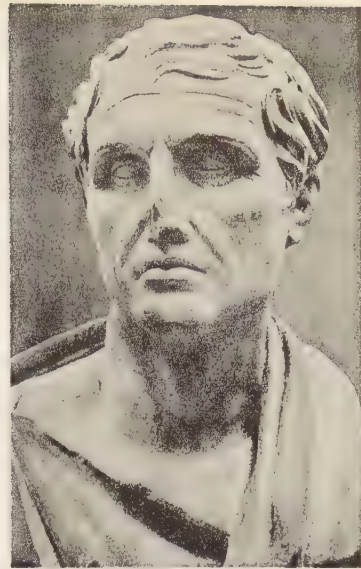
e. Fragment of Marble Tablet with Inscription



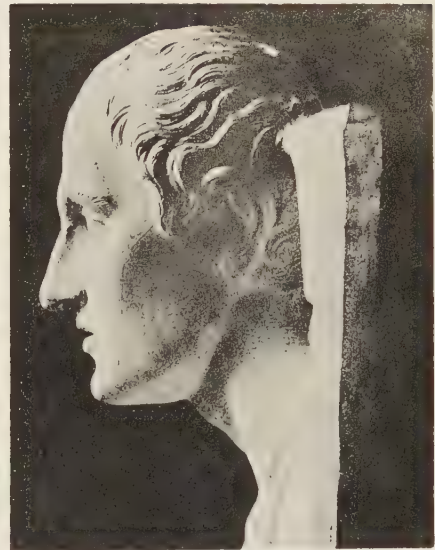
f. Terracotta Lamp



a. Marbury Hall Medallion



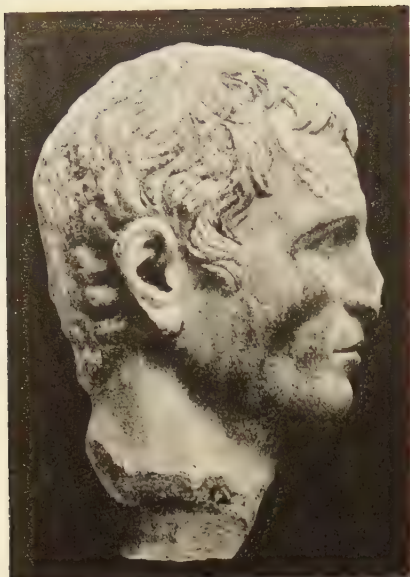
b. Head in Seminario Patriarcale, Venice



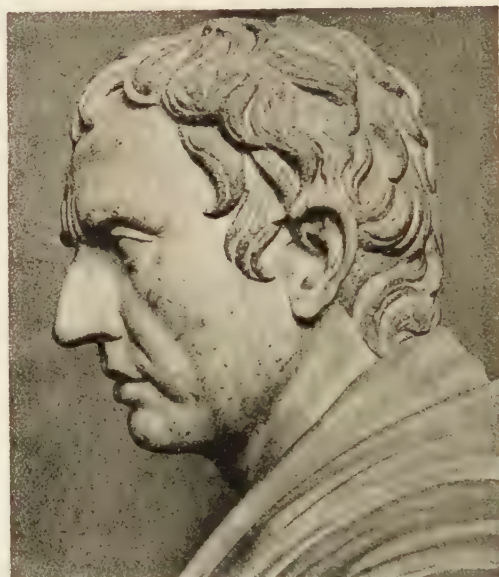
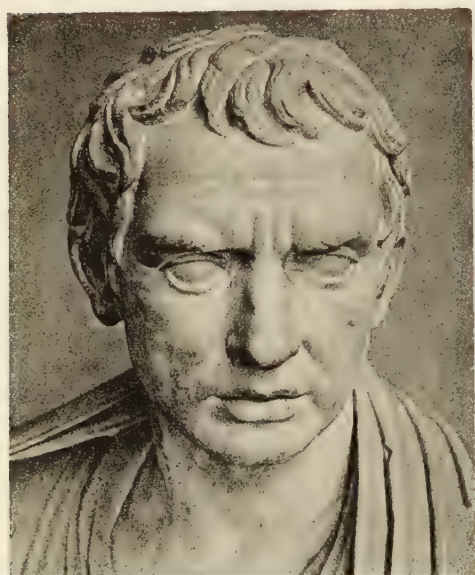
c and d. Marbury Hall Medallion



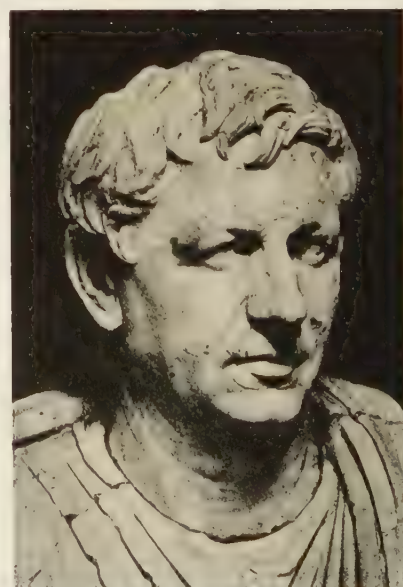
e and f. Head from Corfu



a and b. Head from the House of "Apuleius" in Ostia



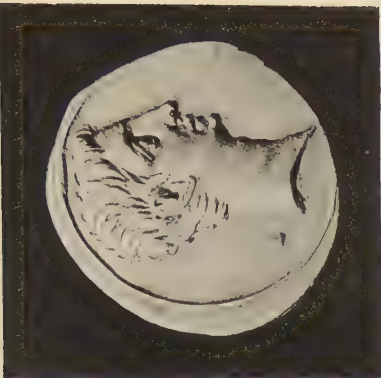
c and d. Head in Copenhagen, Ny Carlsberg Glyptothek, No. 589



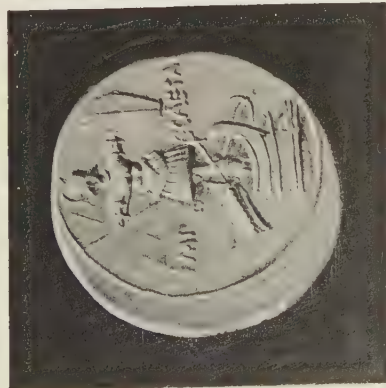
e and f. Head in Ince Blundell Hall



a and b. Coins of Mytilene with Head of Theophanes



c and d. Coin of Augustus, pre 20 B.C.



e and f. Coin of Augustus, pre 20 B.C.

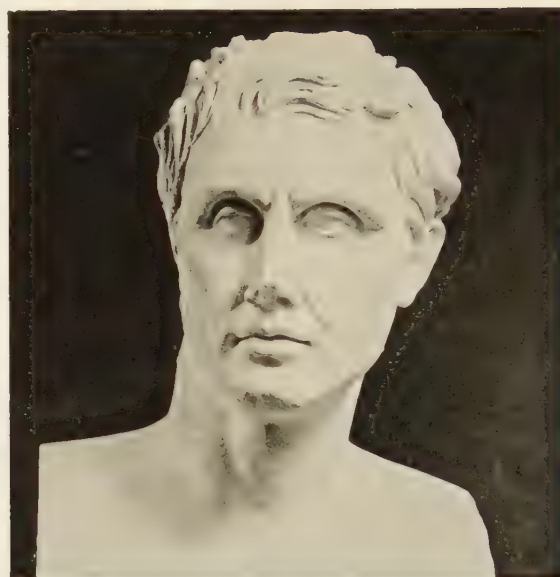


g. Coin of Augustus



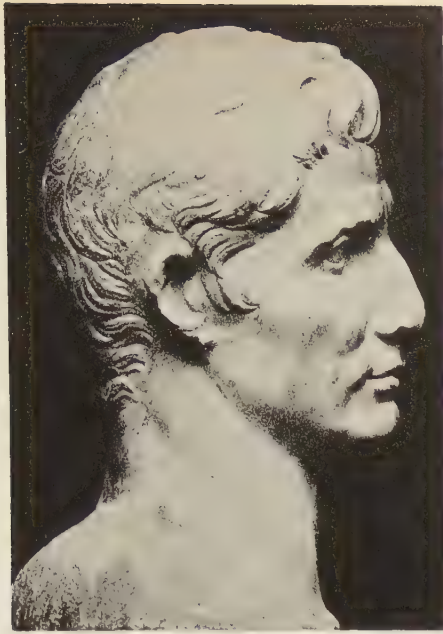
i and j. Coins of Augustus, 19 B.C.

Coins c-j from the collection of the American Numismatic Society, New York



Head of Augustus in Capitoline
Museum, Rome

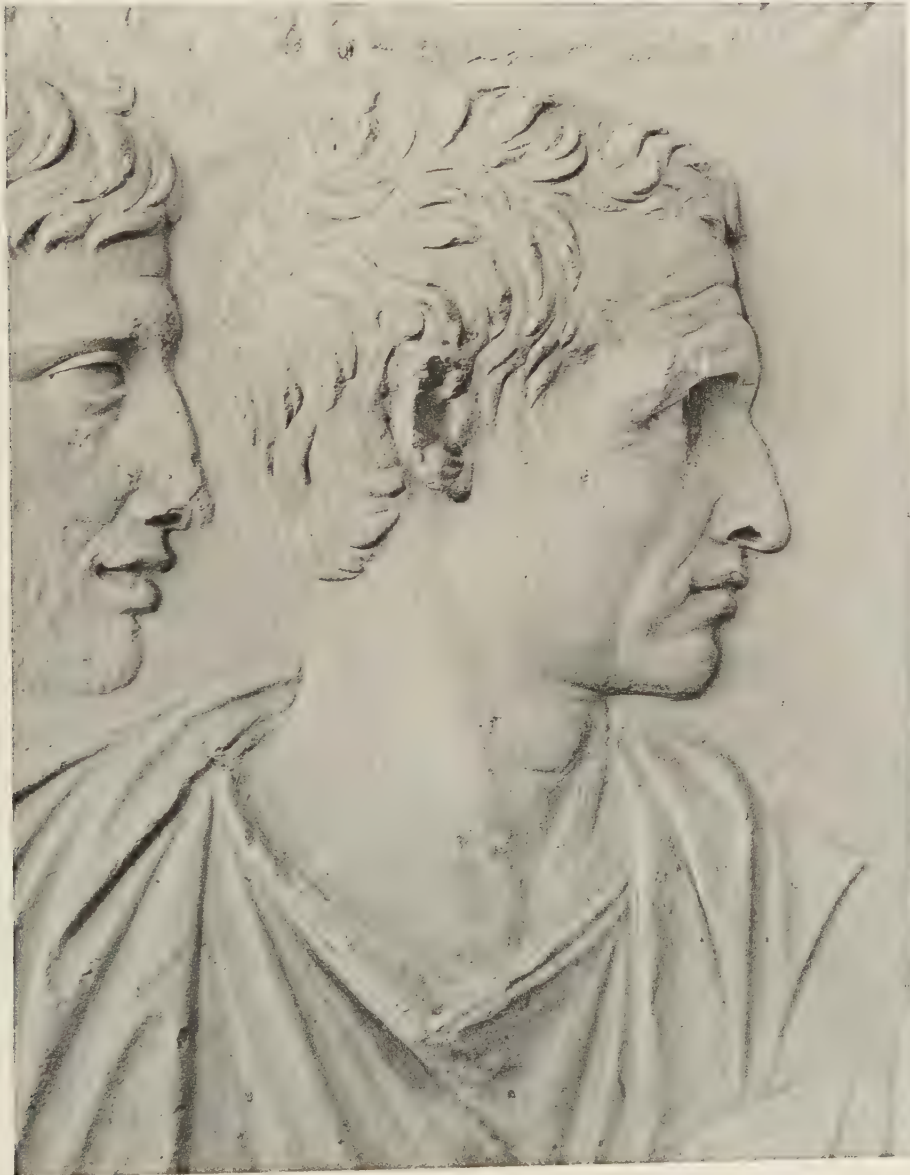
Herm in Museum of Fine Arts, Boston
(*Courtesy, Museum of Fine Arts, Boston*)



a. Head of Augustus in Oslo



b. Coin of Octavian



c. Head of Vergil, Villa Medici Relief



a. Stoa of Attalos: South End from the Northwest (August, 1950)



b. Round Monument Base beneath North End of Terrace of Attalos Stoa, from the Northeast



a. Jug with Cork (P20786)



b. Terracotta Lamp (L4704)



c. Terracotta Symbola (MC820-822)



a. Dog's Grave behind Stoa of Attalos



b. Impression from a Terracotta Mould: Attis(?) (T3044)



c. Impression from a Terracotta Mould: Dancer (T3045)



a. Boundary Stone from beneath Stoa of Attalos (I6311)



b. Marble Fragments from the Northeast Stoa



c. Foundations of the Northeast Stoa from the East



Central Part of the Agora, from the Northwest (July, 1950) (The man in the lower right stands between the Temple and Altar of Ares)

HOMER A. THOMPSON: EXCAVATIONS IN THE ATHENIAN AGORA: 1950



a. Altar of Ares: Foundations from the South

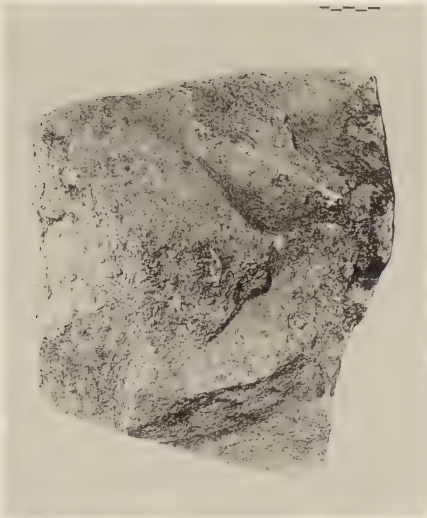


b and c. Bearded Head from Altar of Ares (S1459)

HOMER A. THOMPSON: EXCAVATIONS IN THE ATHENIAN AGORA: 1950



a. Draped Figure found near Altar of Ares (S1072)



b and c. Marble Kouros from north central part of Agora (S1440)



d and e. "Man and Lion" Group from north central part of Agora (S1449)

A BLACK-FIGURED KYLIX FROM THE ATHENIAN AGORA

(PLATES 31 AND 32)

IN THE spring of 1950 an ancient well was discovered in the area behind the Stoa of Attalos, just east of the sixth shop from the south.¹ It was excavated to the bottom which was reached at a depth of 7.70 meters below the present surface of bedrock. The well was beautifully cut, round and true, in the soft green clayey bedrock, and on two sides, the northwest and southwest, there was a series of fifteen footholds designed to help the workman who was digging the well in going down and coming up.

No trace was found of the house that this well was designed to serve nor was the contemporary ground level preserved at any point near by. A pillaged foundation trench of classical Greek times passed over the mouth of the well except for the very northernmost segment, the broad deep footing trench for the back wall of the Stoa of Attalos passed about two meters to the west of the well, and a drain of the Roman period barely a meter to the east. The few remaining "islands" where bedrock stood to a higher level preserved no trace of ancient deposit.

The fill in the upper meter or so of the well was loose bedrock without sherds. The next two meters produced scattered fragments of pottery of the first half of the sixth century B.C., one box full in all, among which we may note two black-figured fragments with animal friezes, rudely drawn, a fragmentary lid of a powder-box pyxis belonging to the Swan Group,² a fragment of a small late Corinthian skyphos with a zone of elongated animals, and several fragmentary unfigured kylixes, one of "komast" shape³ and two shaped like "Ionian" kylixes and having their off-set lips decorated inside with bands of thinned glaze.⁴

The next four and a half meters contained no sherds whatsoever, and the fill consisted sometimes of loose bedrock, occasionally of black mud. At the very bottom lay the kylix which is the subject of this article, broken into well over a hundred fragments; there were no sherds other than those belonging to this vase.

No water gathered in the well, and this combined with the fact that no whole

¹ *Hesperia*, XX, 1951, p. 50.

² Beazley, *Hesperia*, XIII, 1944, p. 55. It is like the lid published in *C.V.A.* Petit Palais, Collection Dutuit, pl. 16, 11-12, except that it has swans on the side only and not on the top which is plain.

³ As Richter and Milne, *Shapes and Names*, fig. 152.

⁴ Somewhat as Sieveking and Hackl, *Die Königliche Vasensammlung zu München*, no. 521, pl. 18. Cf. also Kunze, *Ath. Mitt.*, LIX, 1934, pp. 89-90, Beilage VI, 13.

or nearly whole water jars were found at the bottom, indicates that the well was a failure and was never used. It was probably re-filled at once with the earth that had been dug out of it, which would account for the lack of sherds; near the top some other earth containing a scattering of contemporary sherds was thrown in. The kylix from the bottom of the well must have been broken at the time the well was abandoned and its fragments thrown in with the first shovelfuls of re-fill.

The kylix⁵ (Plates 31 and 32) has been mended from 129 fragments. It is complete in all essentials, and the few missing pieces of rim, bowl and foot have been restored in plaster. It is a kylix of the type conventionally called "Siana" from two examples in the British Museum which were discovered at Siana in the island of Rhodes. This type of kylix had a brief vogue during the first half of the sixth century B.C.; in shape it stands midway between the so-called komast cups and the later little-master cups.⁶

The principal decoration is on the interior of the cup (Plate 31) where we have a large medallion, bordered by a rich lotus and palmette frieze, in which a warrior is depicted running to the left. He is bearded and wears a pointed cap with flaps hanging down over the cheeks; the cap was once red and its lower edge bordered with a row of white dots between incised lines. He carries two spears in his right hand, and his legs are protected with greaves which were once red and bordered with a row of white dots between incised lines. His body is entirely hidden by a large round shield which forms the central feature of the whole design. The shield was white with a red border, and the device, a large satyr's head, must once, when the colors were still fresh, have stood out even more sharply than it does now. This head is rendered by incision; the face, neck, beard and alternate strands of the hair are red, as are the two hornlike shocks of hair which spring from the forehead;⁷ there is an incised rosette on each shoulder.

The outside of the cup (Plate 32) is decorated in the same way on either side; on the lip myrtle, in the handle zone a grazing horse between palmettes which are not quite upright. Red is used for the horse's mane and for a stroke on the hind quarter; also for the hearts, alternate petals and three or four cross strokes at the top of the stem of the palmettes.

Our kylix is not one of the earliest Sianas; in fact, the treatment of the exterior with a single figure on either side and palmettes at the handles already foreshadows

⁵ Inv. No. P 20716. Height 0.130 m. Diameter 0.272 m. Diameter of interior medallion, with border 0.170 m.; without border 0.088 m.

⁶ On kylixes of this type see Beazley and Payne, *J.H.S.*, XLIX, 1929, p. 260; Beazley, *J.H.S.*, LI, 1931, p. 275; and *Metropolitan Museum Studies*, V, 1934, p. 93; and F. Villard, *Revue des Études Anciennes*, XLVIII, 1946, pp. 157-162.

⁷ Compare the tufts of hair above the forehead of the satyr on the shield of Achilles on the Vatican Amphora by Exekias: C. Albizzati, *Vasi Antichi Dipinti del Vaticano*, pl. 40, Furtwängler-Reichhold, *Griechische Vasenmalerei*, III, pl. 131.

the little-master cups.⁸ We might then suggest the years between 570 and 560 B.C. as the date when it was made, and with this the style of drawing would be in accord. Stylistically it cannot be assigned to either of the two large groups of Siana cups, the Heidelberg group which stands close to the early work of the Amasis painter⁹ or the group by the C painter.¹⁰ Nor have I found any close stylistic parallels for it among the unassigned Sianas or other vases of the period, close enough that is to warrant attribution to the same hand. Nevertheless, the vigorous style and the crisp, sure drawing especially on the interior, show us that we have to do with an artist of no mean ability, and this kylix is a welcome addition to the Agora Museum.

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NOTE. This article was written while the author was holding a research grant under the Fulbright Act.

⁸ Cf. F. Villard, *loc. cit.*, pp. 159-160.

⁹ Beazley, *J.H.S.*, LI, 1931, pp. 275-282; *Met. Mus. Studies*, V, 1934, p. 98, note 20.

¹⁰ Beazley, *Met. Mus. Studies*, V, 1934, pp. 93-115; cf. Martin Robertson, *J.H.S.*, LV, 1935, pp. 224 and 227.

EPIGRAPHICAL NOTES

I. *I.G.*, II², 1804

THIS inscription of the late Empire period deserves a closer study because it is a unique prytany list and because its restoration has not been based on an accurate study of the dimensions of the stele. An examination of the squeeze shows that the restoration in the *Corpus* by Graindor is wrong, particularly with respect to the length of the line. A sufficient arc of the circumference of the circle inscribed within the *ἀέτωμα* remains so as to determine, in conjunction with the right corner of the *ἀέτωμα* which is intact, the width of the stone. A projection of the dimensions of the *ἀέτωμα* results in an isosceles triangle, its base 40.64 cm., its height 20.32 cm. Hence the width of the stele is 40.64 cm., with the length of the line *ca.* 18 letters.

For the restoration of the text Graindor compares *I.G.*, II², 1763 and 1817. The closest parallel to this unique prytany list which begins with the archon in the accusative rather than the customary genitive case is *I.G.*, II², 1791 which has two prescripts, one honoring the archon (in the accusative case) and the other, the traditional one, honoring the *ἀείσιτοι*. In view of the new measurements, the parallel in *I.G.*, II², 1791, and a more accurate reading of the squeeze the following text is submitted. Lines 9 ff. are restored merely to show the general sense of the document.

	[Ἀγαθῇ Τ]ύχη
	[τὸν ἄρχον]τα Ξενοκλέα
	[Ἀχαρνέα ἐ]πὶ τῆς Οἰνεί <i>vac.</i>
	[δος φυλῆς] γ > πρυτανεία[ς]
	[ἡ ἐγραμμάτευεν] Εἰσίδο[τος]
5	[— <u>patronymic demo</u> —]π[— ^{-tic} —]
	[οἱ πρυτάνεις τῆς Οἰνεί]
	[δος φυλῆς ἐπὶ τῇ εἰς εἰαν]
	[τοὺς εὐνοία]
	[ἐπ' ἄρχοντος Ξενοκλέους]
10	[Ἀχαρνέως, στρατηγοῦντος]
	[ἐπὶ τὰ ὅπλα — — — — —]
	[— — — οἱ πρυτάνεις τῆς Οἰ]
	[νείδος φυλῆς τιμήσαντες]
	[εἰαντοὺς καὶ τοὺς αἰσίτους]
15	[ἀνέγραψαν — — — — —]

The demotic of the archon is supplied from *I.G.*, II², 1803, line 12, the councillor with whom this archon has been identified by Graindor. It is apparent that the archon is being honored by his own tribe, a unique feature in the extant prytany lists. If the secretary could be identified with Εἰσίδωτος Φήλικος Ἀγγεληθεῖν (*Hesperia*, XI, 1942, no. 23, p. 57), whose restoration is epigraphically possible, the date of the

archon in accordance with the tribal cycles ¹ would be 188/9. However, Raubitschek's restoration of Commodus for the archon in 188/9, ² especially with the correct reading of Σ[εβα]στρο[ϗ], leaves no room for the restoration of Xenokles. In view of the fact that the π in line 5 comes where it ought to be restored as part of the demotic ³ and because of the high incidence of the name Εἰσίδοτος, it is evident that we have a new prytany secretary.

The ἀέτωμα itself gives us evidence corroborating the date of the archon, 197/8-199/200, as was assigned in *Hesperia*, XVIII, 1949, p. 31. The inscribed circle, almost completely tangent to the three sides of the ἀέτωμα, seems to be a unique physical characteristic of ephebic catalogues dated 190-200. ⁴ *I.G.*, II², 2125 and 2127, like *I.G.*, II², 1804, containing such an inscribed circle, have been dated independently 190-200 by Kirchner and 193/4 and 194/5 respectively by the writer. ⁵

II. THE Αὐρήλιοι IN *I.G.*, II², 1824

The question as to the identity of the Αὐρήλιοι in *I.G.*, II², 1824 is worth settling once and for all, because the four archons mentioned in the sequence *I.G.*, II², 1824-1828 furnish the only secure foundation for the chronology of a large number of inscriptions in the first half of the third century after Christ. Because of the position of the Αὐρήλιοι on the stone, framed as the word is by leaves, and the prosopography of the two councillors Αἴλιος Λόγισμος and Πρέμνος Ἐπικτήτο[υ] in *I.G.*, II² 1824, lines 9 and 27, I identified ¹ the Αὐρήλιοι with the two Roman emperors M. Aurelius Antoninus (Elagabalus) and M. Aurelius Severus Alexandrus who jointly share the rule from 221 through March 222, when Severus Alexander succeeded Elagabalus. Oliver challenges this identification and suggests that the Αὐρήλιοι are Septimius Severus and Caracalla and hence would date *I.G.*, II², 1824 between 196 and 211. ²

I wish to reopen this question first because of an important piece of evidence which makes impossible the identification of the Αὐρήλιοι with Septimius Severus and Caracalla and secondly because of new evidence which has appeared since our earlier discussions. Though Septimius Severus had himself adopted as the son of Marcus and the brother of Commodus in 196, ³ nowhere in Latin or in Greek, either in his-

¹ J. A. Notopoulos, "Studies in the Chronology of Athens under the Empire," *Hesperia*, XVIII, 1949, p. 51.

² A. E. Raubitschek, "Commodus and Athens," *Hesperia*, Supplement VIII, 1949, p. 282.

³ I am indebted to Meritt for this suggestion.

⁴ Cf. *I.G.*, II², 2124. For a similar one flanked by vases in a later period cf. *Hesperia*, XI, 1942, p. 73.

⁵ *Hesperia*, XVIII, 1949, pp. 30-31.

¹ *Hesperia*, XVIII, 1949, pp. 37-39.

² J. H. Oliver, "Patrons Providing Financial Aid to the Tribes of Roman Athens," *A.J.P.*, LXX, 1949, pp. 305-307 n. 5.

³ Dio Cassius 75.7.4; *Vit. Sev.* 10.6. The only indication of Septimius' self-adoption into the family of the Antonines is the word *pius* on coins celebrating the occasion. Cf. M. Platnauer, *The Life and Reign of the Emperor Lucius Septimius Severus* (Oxford, 1918), p. 34.

torical, epigraphic or numismatic evidence,⁴ does the *nomen gentilicium* Aurelius appear in his official title which is Imp. Caesar L. Septimius Severus Pertinax Augustus. Likewise in Attic inscriptions,⁵ dated during his reign, he never appears as Αὐρήλιος but as Αὐτοκράτωρ Δούκιος Σεπτίμιος Σεβήρος Σεβαστὸς Περτίναξ Ἀραβικὸς Ἀδιαβηνικὸς Παρθικὸς μέγιστος. On the other hand Elagabalus and Severus Alexander always appear in both Latin and Attic inscriptions with the *nomen gentilicium* Aurelius. If this is the case, the burden of the proof rests with anyone who claims that the Αὐρήλιοι in *I.G.*, II², 1824 include an emperor who, as all our evidence shows, never used the *nomen gentilicium*.

In addition to the prosopography of the two councillors in *I.G.*, II², 1824, who appear as ephebes in *I.G.*, II², 2193 (A.D. 206),⁶ *I.G.*, II², 2149, which has been recently joined with *I.G.*, II², 2145 + E. M. 4204 + 3568 by Mitsos in Athens, corroborates the above conclusion. This newly joined inscription results in a new archon, Αὐρ. Μελοπομενός who is hoplite general in the Αὐρήλιοι inscription. The new text⁷ of *I.G.*, II², 2149 + 2145 + E. M. 4204 + 3568 mentions in the prescript τοὺς περὶ τὸ [Διογένειον], a phrase which appears only in the prescripts of *I.G.*, II², 2239 and 2243 dated 238/9-243/4 by Kirchner and 239/40 and 244/5 by myself. The archonship of Αὐρ. Μελοπομενός therefore must be placed in the context of the third decade of the third century. This necessitates Αὐρ. Μελοπομενός being hoplite general much later than 196-211, and this can only be in 221/2 when the Αὐρήλιοι mentioned in the same inscription are Elagabalus and Severus Alexander who ruled jointly until March 222.⁸

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⁴ Platnauer, *op. cit.*, pp. 22-37; *Prosopographia Imperii Romani*, III, pp. 213-215.

⁵ *I.G.*, II², 1077, 3413-3415, 4216; *Hesperia*, X, 1941, p. 251, no. 53, lines 1-2; cf. *I.G.*, III, Indices, p. 310.

⁶ *Hesperia*, XVIII, 1949, pp. 34-35.

⁷ Mitsos, *Ἀρχ. Ἐφ.*, 1950-1951, pp. 21-23.

⁸ As to the difficulty which Oliver finds with the restoration of Αὐρήλ[ιος] in *I.G.*, II², 1825 (222/3), my alternative restoration of Αὐρήλ[ιος], referring to Severus Alexander only, does away with the difficulty.

For the sake of the record of Athenian prosopography, several identifications brought up in Oliver's discussion must be re-examined in the light of the date of *I.G.*, II², 1824. Raubitschek identified (*Hesperia*, Supplement VIII, 1949, p. 280) Πεινάριος Πρόκλ[ος] ('Αγνούσιος), who appears as eponymous in *I.G.*, II², 1824, line 8, with [ἐξηγητῆς? Γάιος Πεινάριος] Πρόκλος Ἀγ(νούσιος) in *I.G.*, II², 1796, line 11 (186/7). I think that we are dealing with father and son, as Raubitschek himself now suggests (*per litt.*). A question arises as to the identity of the eponymous Αἶλ Λεύκιος in *I.G.*, II², 1783, line 8, dated in 221 by myself (*Hesperia*, XVIII, 1949, pp. 42-43), with the eponymous ΑΙΑΕΥ [ΙΑ]ΛΛΗΝΕΥΣ in *I.G.*, II², 1792 (187/8). I claimed that they were different persons, probably father and son, while Oliver maintains that they are identical. In his table of eponymoi Oliver gives an alternate reading for the eponymous of *I.G.*, II², 1792 as Αἶλ. Εὐ[φρόσυνος Πα]λληνεύς. This identification is difficult for Αἶλ. Εὐφρόσυνος Παλληνεύς is ἐπιστάτης in *I.G.*, II², 1817, dated shortly before 220/1. (*Hesperia*, XVIII, 1949, p. 37). The squeeze of *I.G.*, II², 1792 at the Institute for Advanced Study shows a small fracture in the stone after ΝΥΜΟΣ and consequently no further light can be thrown on the reading of line 8. At the time Skias read this stone he reported an uninscribed space of one letter between ΜΟΣ and ΑΙΑΕΥ

SEPULTURAE INTRA URBEM

(PLATES 33-54)

INTRODUCTION

Ab Atheniensibus locum sepulturae intra urbem ut darent, impetrare non potui, quod religione se impediri dicerent; neque tamen id antea cuiquam concesserant . . .

Cicero, *Ad familiares*, IV, 12, 3.

MARCUS Marcellus, a friend of Cicero and of Servius Sulpicius, met his death at the hands of an assassin near Athens in B.C. 45. A letter from Servius to Cicero, from which is quoted the above excerpt, describes the circumstances of the murder. Servius was himself in Athens at the time, and he undertook the arrangements for the funeral. Denied a place of burial "within the city" because of religious usage, he laid his friend to rest in the Academy outside.

This statement in the correspondence of Cicero has been interpreted by scholars as evidence for the existence of a religious ban against burial within the city walls of Athens; in fact, the positions of long stretches of the city wall have themselves been restored conjecturally, in places where any tangible remains are lacking, on the evidence of the presence or absence of graves. On a site like that of ancient Athens, covered today by a great modern city, systematic excavation in search of the walls themselves is impossible, and the evidence turned up by chance in the limited areas dug for the foundations of new buildings must necessarily be scattered and haphazard. The American Excavations at the Agora, on the other hand, by the clearing of a large area which unquestionably lies *in toto* "within the city" afford a unique opportunity for testing the validity of Servius' statement and the scope of the ban implied by it.

The number of graves discovered in the area around the Agora increases with each campaign of digging. Up to 1950 nearly one hundred fifty graves, which include inhumations, cremations, and urn-burials, have been found. The very number is somewhat startling in view of Servius' statement, and for this reason the time is perhaps ripe for an examination of the evidence afforded by the existence of this unexpectedly large number of graves in an area where there should be none. It must of course be remembered that only about one half of the area included in the American Excavations has up to the present been cleared below the level of Roman times, and that future digging may uncover evidence which will require some alteration in the deductions offered here. These deductions are based almost entirely on evidence from a large triangular area (plan, Pl. 33) which lies outside the Agora proper on the lower slopes of the Areopagus to west and northwest. A detailed study of this area will

appear in the ensuing number of *Hesperia*. It is defined by three of the main streets of ancient Athens, which have been called respectively Piraeus Street at the north, running eastward into the city from the Piraeus Gate; Areopagus Street at the east, which skirts the slope of the Areopagus, running southward from the Agora; and Melite Street on the opposite side of the valley, following the lower slopes of the Hill of the Nymphs and the Pnyx at the west and southwest. The south branch of the Great Drain, running from south to north and draining the valley between the hills at either side, bisects the area. Its course was followed in early times by a street which has been called the Street of the Marble Workers. The area bounded by these streets was an industrial and residential part of the city, occupied by private houses and workshops. It would be surprising indeed to find any graves, unless of very early or very late date, in the Market Place itself. The areas surrounding it thus afford a better proving ground for the existence and scope of the ban than does the Agora proper, and the particular area under present discussion may be taken as a fair sample, since it occupies a large tract of nearly two acres which has been cleared to bedrock almost throughout.

All the graves discussed in detail below were found in this area. They may be divided into three groups: early burials and cremations, from the Late Bronze Age through Protogeometric and Geometric times; archaic cremations and inhumations of the sixth century; and cremations of small children or infants made in the fourth and third centuries before Christ. The early graves of the first group, found over the entire area of the excavations including the Market Place itself, may be taken to have been made before the ban on burial within the city came into effect. Conversely, graves of later Roman times, which have been found in the Market Place and on the eastward slopes of the Pnyx, may be taken to have been made after the Athenians had retired within their new fortification, the "Valerian Wall," by which time most of the area of the former city had become a suburb outside the new wall, and the ban no longer applied. The graves of the second and third groups may be more useful to us in helping to determine the date at which the ban came into effect, and the limits of its application. A few examples of both groups have been found in areas other than the one under discussion. A child's urn-burial and the remains of a small pyre, both of the late sixth century, have come to light on the northern slope of the Areopagus; and pyres of the later type, or the scattered remains of such pyres, have been found in almost all parts of the excavations excepting only the Market Place proper. The occasional burning or burying of the dead in residential or industrial areas within the city thus seems to have been unimpeded by any religious ban in the sixth century. If this ban did not come into effect until the end of the sixth century or later, it can hardly have been applicable to still earlier graves, and so we may pass over very briefly the burials of the Late Bronze Age and of Protogeometric and Geometric times.

EARLY BURIALS

The lower slope of the Hill of the Nymphs seems to have been used as a cemetery in Mycenaean times (plan, Pl. 33); one chamber tomb containing two burials and traces of two earlier ones which had been displaced by them was found within our area. Near by and somewhat higher on the slope a cutting in the hillside is perhaps best explained as an unfinished chamber tomb of the same period; and near the dromos of the first tomb, a few meters to the south, was found a cist-burial of late Mycenaean times containing the skeletons of two small children. Little need be added here to the brief notices of these burials which have appeared in the general annual reports;¹ detailed study of the burials themselves and the vases found with them may be left for a more specialized later work dealing with all the Late Helladic remains in the Agora Excavations. It is of interest to note, however, that some rather cryptic cuttings in the rock which lie in the forecourt of the New Bouleuterion and in the west side of the unidentified building to the south of the Tholos, are best explained as the remains of Mycenaean chamber tombs which had for the most part been quarried away by later builders.² The possibility is strengthened by the finding of otherwise unexplained Mycenaean sherds and a bronze dagger in the filling of the cutting in the court of the Bouleuterion. If these cuttings are the remains of Mycenaean chamber tombs, then the cemetery would seem to have been strung out along the eastern slopes of the Kolonos Hill as well as the base of the Hill of the Nymphs, and the Athenians of the Late Bronze Age must have taken advantage of the rising slopes to make their chamber tombs all along the west side of the valley, as they did also on the north side of the Areopagus.

Graves of Protogeometric and Geometric times have been found scattered throughout the excavations. Evidence has been collected elsewhere³ to show that the positions of these suggest the lines of the roads or footpaths of the time, the forerunners of some of the streets of archaic and classical Athens. Only one of these, Grave A, lies within the area of our particular study; it is published here because its position (plan, Pl. 33—marked a, beside the wall dividing Houses B-C, and just below the Roman mosaic floors) suggests the line of the street which ran southwestward along the bottom of the valley in early times. A near by cutting in the hardpan may once have been the place of another burial; these graves seem to have been made beside the road, perhaps by the inhabitants of a near by house of which the existence was suggested by its well. Another grave, and traces of further burials of Geometric times, were found in the archaic cemetery in the southern part of our area (plan, Pl. 33 and Figs. 1-2); they suggest a burying ground perhaps continuously used from the eighth through the sixth century, and again beside a major road, Areopagus Street, which

¹ *Hesperia*, XVII, 1948, pp. 163-165 and pl. 45; XVIII, 1949, p. 215 and pls. 38-39.

² *Hesperia*, VI, 1937, p. 167 and fig. 126; V, 1936, p. 15 and fig. 13.

³ *Hesperia*, XVIII, 1949, pp. 275 f.

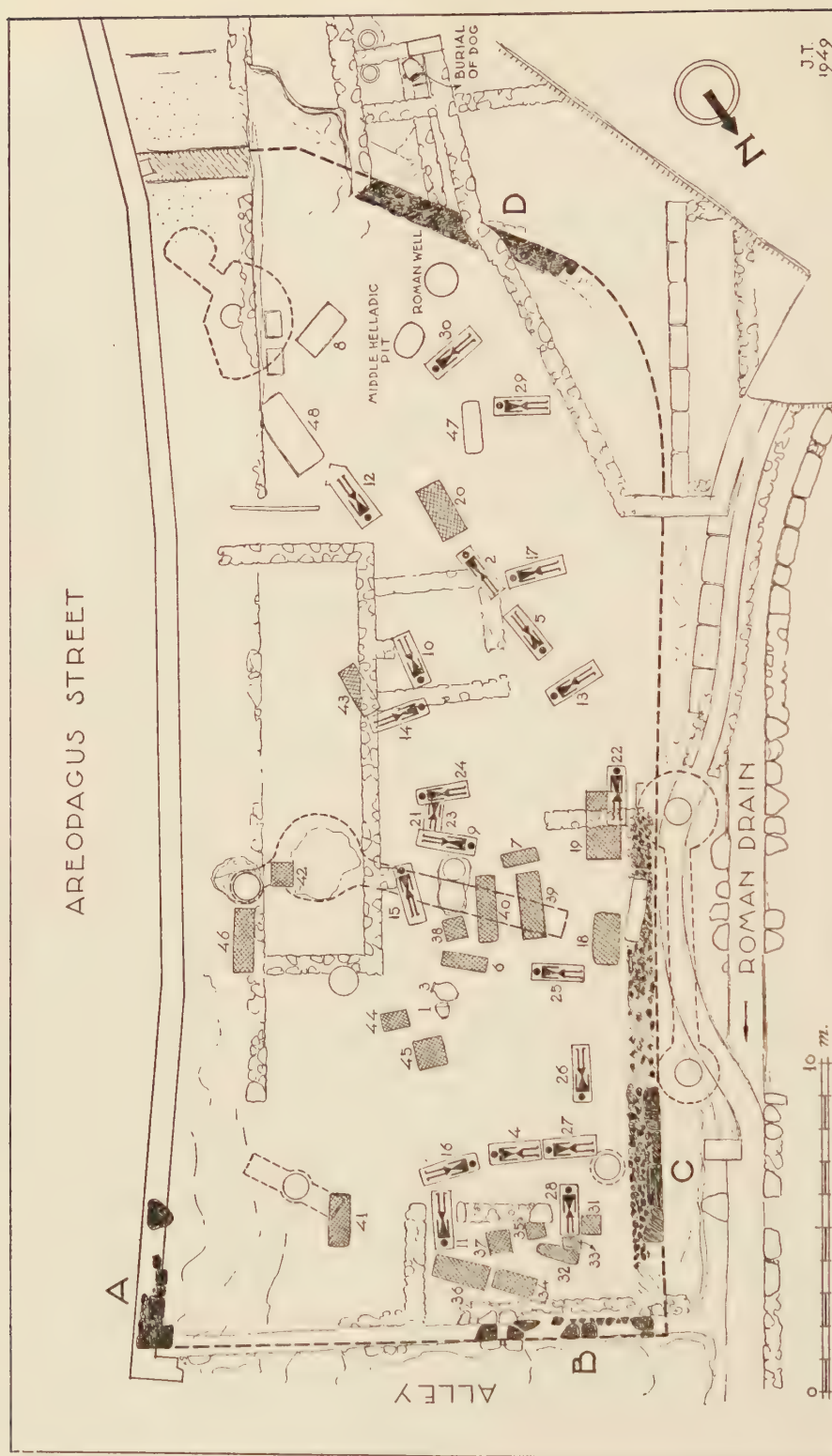


Fig. 1. Plan of Archaic Cemetery: Actual State.

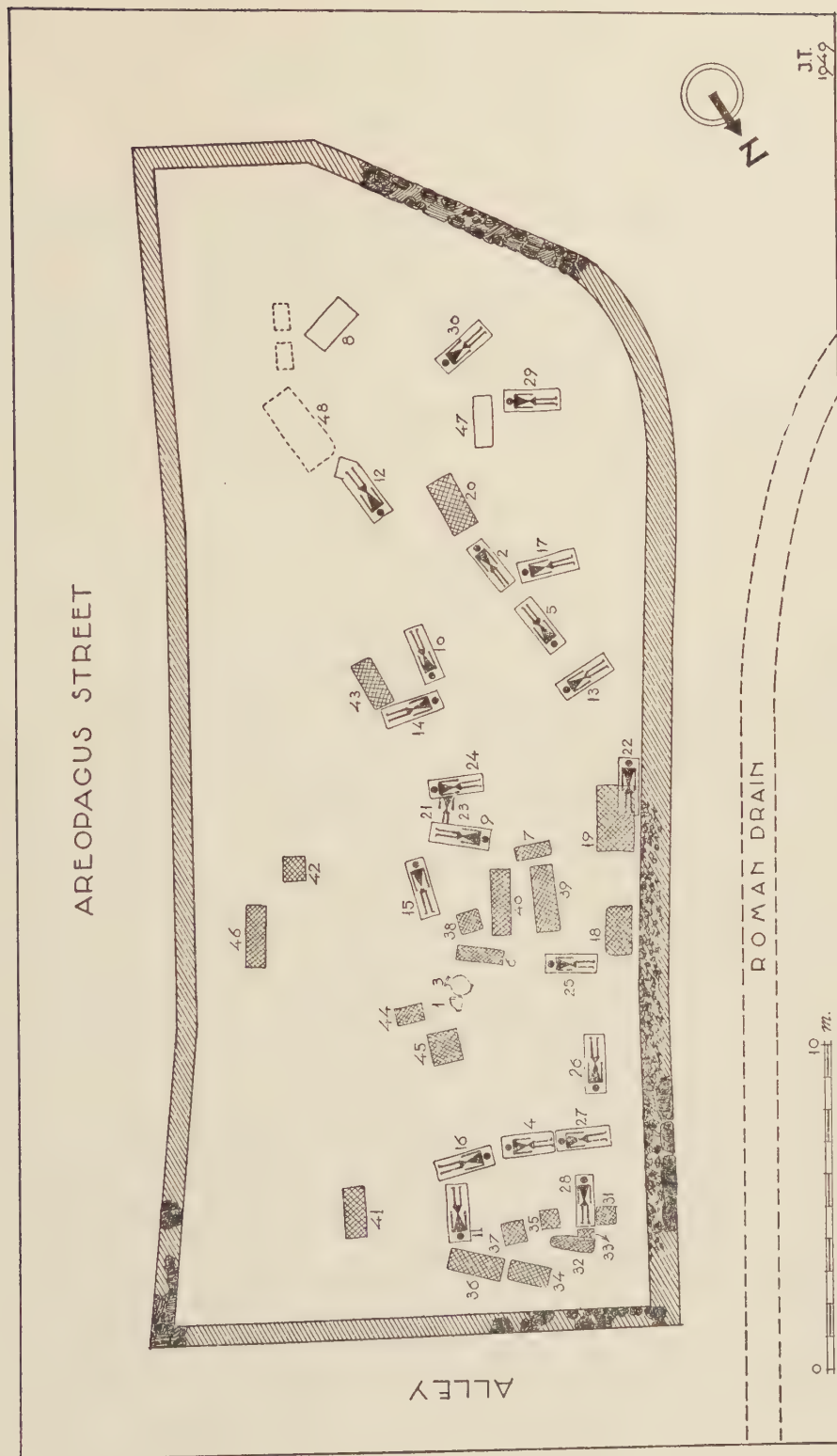


Fig. 2. Schematic Plan of Graves in Archaic Cemetery.

passed by just to the east. The traces of burials of Geometric times which lay in the graveyard are treated with all the other graves of the archaic cemetery (below, pp. 82-85); there follows a brief account of an urn-burial, which was isolated from the cemetery though it may have been one of a separate group of Geometric graves of which the others have disappeared (plan, Pl. 33).

The grave⁴ lay under the southeast room of House C; it was largely destroyed by the builders of the south wall of the house. The pot containing the body, an amphora (Pl. 35b),⁵ had been laid on its side with the mouth toward the north. Only the lower part of the body lying on hardpan, with a bit of the neck, was in place. In this fragment of the burial urn, and in the filling immediately around, were found a few fragments of a human skull, finger bones, and other bits. These seemed to belong to a child rather than an infant; but not enough remained of the amphora to show how the body had been inserted into it. It dates probably from the second half of the eighth century.

THE ARCHAIC CEMETERY

Position and Enclosure

Within an enclosed peribolos in the southeast part of the area were found forty-eight graves, ranging in date from late Geometric times to the close of the sixth century. The cemetery lay along the west side of Areopagus Street for a distance of about 36 m. (plan, Pl. 33 and Figs. 1-2). At the north it was bounded perhaps by a smaller street or alley; here for a space of two meters toward the north of the enclosure the bedrock, which was covered by a filling of Byzantine times, showed no trace of cuttings for more graves or for wall foundations. The strip was apparently left unoccupied by building because it offered a way of access from the Areopagus to the bottom of the valley, and the eastward continuation of this alley may be traced between the house foundations above Areopagus Street in Doerpfeld's old excavation.⁶ Our cemetery thus lay at one corner of a crossroad. Its east wall bordered the street, serving at the same time as an enclosure for the graveyard and as a retaining wall for

⁴ *Hesperia*, XVII, 1948, p. 116; XVIII, 1949, p. 276.

⁵ Inv. P 18412. Pres. H. 0.56 m. Mended from many fragments. Part of one side preserved, from above the foot to the shoulder, with a fragment of the lower part of the neck. Nothing of the foot remains. The shoulder, and a zone above the foot, solidly glazed; the rest of the body banded. On the reserved neck, diminishing triangles, with a St. Andrew's cross inside at the center and horizontal zigzags to the side. Attic clay; dark to light brown glaze thin and somewhat worn. The overall banding is reminiscent of Early Protocorinthian practice. The conventional neck ornament of late eighth and early seventh century amphoras is probably derived from Geometric predecessors like this one: cf. *Hesperia*, Supplement II, p. 29, fig. 16. The Geometric amphora from the archaic cemetery, Grave 1, p. 83 and Pl. 35c, was probably very similar.

⁶ *Ant. Denk.* II, pl. 37.

the roadway, which lay higher on the slope. Since the street followed the same line throughout antiquity little remains of the original east wall of the cemetery, which was superseded by the foundations of later houses fronting on the thoroughfare. A few stones remain in place at its north end and at the northeast corner (A on the plan, Fig. 1). These are rough limestone blocks of considerable size, loosely fitted together to a thickness of about 0.70 m. The few blocks still in place were merely bedding stones, well below the ground level both of the cemetery and of the street beside it. Their age is attested by a few sherds from a sandy fill which overlay them, accumulated after the wall had gone to ruin: fragments of coarse amphoras covered with streaky glaze of the sixth century. This fill had evidently been deposited by water.

The last block toward the north was clearly a corner block, showing the beginning of a return toward the west which could be traced also in the two overlying courses. Beyond this corner to the west nothing remained of the north wall of the cemetery beside the alley. On its line lay a drain which had remained in use into Roman times, carrying the waters from the Areopagus under or beside the alley to the drain in the bottom of the valley. A few stones remained in place (B on the plan, Fig. 1) to show that there had existed a built conduit with walls at each side of the cutting, facing toward the inside. But beneath this drain, in the bottom of the cutting, lay a number of rough limestone boulders so covered and encrusted with lime deposited by the flowing water that their close examination was impossible. These in all probability were once bedding stones of the peribolos north wall. It would seem that at an early age this part of the enclosure was damaged or destroyed; stones were taken from its foundations for reuse elsewhere, perhaps when the Athenians were reconstructing their houses after the Persian withdrawal. The plundered wall trench then offered a good channel for drainage, and later a built drain replaced what had perhaps by chance become an outlet for water flowing down the slopes of the Areopagus. The early deposit of sand which overlay the corner of the peribolos indicates not only that the water found its own way down the slope on this line, but also that it began to do so at an early date, perhaps before the middle of the fifth century.

The width of the cemetery at its north end was between 15 and 16 m. The northwest corner of the peribolos was not preserved, and little if any of its west side. At one place near the northwest corner a row of four blocks remains in place (C on the plan, Fig. 1), obviously early in style (Pl. 34b). This series stands at the edge of a gentle slope, on the brink of a more precipitous one; it is the obvious line on which a retaining wall could be built economically and without the necessity for carrying the foundation too deep. The wall is one meter thick, built with large blocks of limestone, well faced, toward the west, and a rubble backing at the east. The discrepancy in style between this stretch and another at the south where the original peribolos wall is well preserved made it seem unlikely that this could be a part of the west wall of the enclosure, though it seemed certain that it must follow the same line as did the original

wall. Actually, some probing in its bedding stones produced an ostrakon of Aristides the son of Lysimachos (Inv. P 19840) and a handful of sherds of the late sixth and early fifth centuries. This section of wall, then, is post-Persian though probably built at some time before the middle of the fifth century. It must have been built soon enough after the Persian sack so that the position and boundaries of the cemetery were remembered by the later builders; no evidence was found to indicate that the graveyard was not intact at the time of the invasion. Whether the wall was rebuilt as an act of piety to restore the peribolos, or an act of utility to restore the terrace above so that it could be put to other uses, we cannot know for certain. That the former was more probably the case we shall see from the later history of the area.

The west wall of the cemetery ran roughly parallel to the east wall, curving slightly with the contours of the hillside, for a distance of about 29 m.; then it bent toward the southeast, running in a nearly straight line for about 16 m., when it again bent toward the east to meet the street wall at the southeast corner of the cemetery. The best preserved piece of the peribolos wall (D on the plan, Fig. 1) lies in this southern stretch, where it stands to a height of 1.75 m. (Pl. 34c). It is constructed of large and small limestone blocks, roughly shaped but well fitted. Though not careful or elaborate enough to fit into any definite style of masonry, it may perhaps be called rubble tending toward polygonal; not closely datable, but clearly archaic in type. Although burials were made in this area as early as the eighth century it does not seem to have been enclosed by a peribolos wall until the sixth; the style of the masonry employed here is far more advanced than that, for example, of the earlier peribolos of the cemetery to the south of the Tholos.⁷

The cemetery wall may have been more elaborate at east and north, where it was exposed to public view beside the streets. That it was so is suggested by a number of limestone blocks built into later house foundations and the later retaining wall of the street. In all probability the original source of these was the east wall of the sixth century peribolos. They are cut in good polygonal style with smooth outer faces and carefully trimmed edges to assure tightly fitted joints. The late walls in which they were reused appear on the general plan (Pl. 33). These formed the foundations of a house (House U) probably of the first or second century of our era. Fragments of sigillata and other wares of the beginning of the Roman period, as well as lamps of Broneer's Type XX,⁸ found in connection with these walls, suggest such a date. Other parts of our area show this to have been a time of great activity in house-building in this district of Athens; but the remains of this particular house were so tenuous and fragmentary that it was impossible to recover its ground-plan beyond the suggestion that a row of rooms, perhaps shops, fronted on the Areopagus Street. In any case, its foundations did great damage to the burials in the cemetery, naturally long

⁷ *Hesperia*, Supplement II, p. 9, figs. 3-4.

⁸ O. Broneer, *Corinth*, Vol. IV, Part 2: *Terracotta Lamps*, Cambridge, Mass., 1930.

forgotten after the lapse of six centuries. Damage had already been done before the building of the house in the Roman period, especially at the west side of the cemetery, where a coarse gravelly silt of late Hellenistic times went in places to the level of the bottom of the graves. Water washing down from the slopes of the Areopagus at the east after the disappearance of the terrace wall of the cemetery and its successors, had made deep channels in the soft earth, in which it deposited the silt brought from above. This probably happened during a period of neglect following damage or destruction of the retaining walls and the drainage system; the pottery found in the silt suggests the decades following the siege and capture of Athens by Sulla.

Although the uncontrolled flow of water down the slope of the Areopagus and the building of Roman houses did the greatest amount of damage to the burials in the cemetery, other evidence suggests that it had been built over and forgotten long before the time of Sulla. Three wells and five cisterns were found within the limits of the peribolos; and they must have served the needs of private houses or other buildings standing on the spot. The earliest of these had been filled up toward the end of the third century B.C.; this suggests that the area had been used for habitation perhaps as early as the late fourth century or the beginning of the third. Of the dwellings which must have occupied the area in Hellenistic times no recognizable traces were found other than their wells and cisterns; no doubt they were obliterated not only by the builders of House U in their search for building material, but also by the people who in late Roman times in turn plundered House U for the same purpose.

A large fragment of a marble sarcophagus was found built into the east wall of the Great Drain in the bottom of the valley a few meters to the west of the cemetery. Nearly half the floor, and the end of one wall at the corner to its full height are preserved.⁹ The sarcophagus was cut from a single block of island marble. The simplicity of its decoration—plain vertical wall carefully finished and surmounted at the rim by an ovolo moulding with a smaller half-round below (Fig. 3 and Pl. 34d)—suggests that it was once decorated with painting, though no trace of the original colors now remains. The sarcophagus stood on separately made feet, as is shown by a square cutting on the under side near each corner. The corners were strengthened by leaving plain quarter-round columns projecting on the inside to the full height of the wall. No trace of the cover was found. The use of island marble, and the profile of the moulding, suggest an archaic date for this sarcophagus; and indeed marble sarcophagi more elaborate than this are not unknown from the latter part of the sixth century.¹⁰

⁹ Inv. A 1129. H. 0.765 m.; W. 0.84 m.; Pres. L. 1.29 m.

¹⁰ A sarcophagus from Samos, in the form of an Ionic temple, with traces of painting in red and blue, dated in the sixth century: *Ath. Mitt.* XVIII, 1893, p. 224; XXV, 1900, pp. 208 ff., no. 123; Boehlau, *Aus ionischen und italischen Nekropolen*, Leipzig, 1898, pp. 9, 14. An archaic terra-

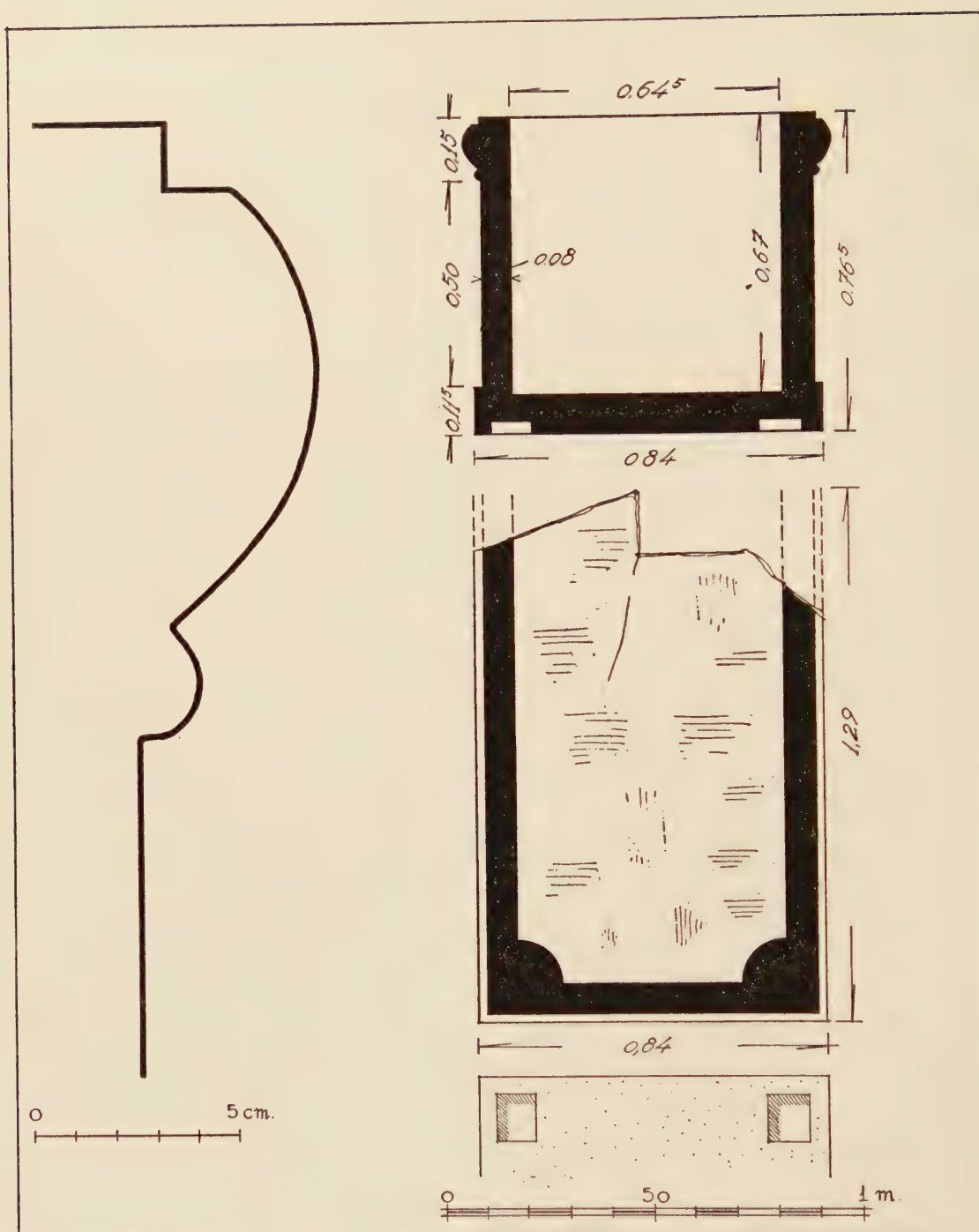


Fig. 3. Marble Sarcophagus: Plan and Section, Showing Mouldings.

Date and proximity of finding-place both suggest that the sarcophagus had been used in the first instance for a burial in the near by archaic cemetery. Evidence from a number of places proves that the walls of the Great Drain, in which it was reused as building material, were built in the opening years of the fourth century. At that time, however, the sarcophagus was evidently already shattered; the broken corner, and the quarter-round support inside it, were carefully trimmed to a flat surface with the chisel, so that the block might fit neatly into the masonry of the drain wall. Further, considerably less than half of the sarcophagus itself, and none of its cover, was used in the drain wall, which suggests that by the beginning of the fourth century the other fragments had become scattered and lost. Thus it would seem that before the beginning of the fourth century the archaic cemetery had been abandoned and some at least of its graves desecrated. Though it is possible that the sarcophagus could have been dug up and broken as early as the Persian sack, in that case its fragments would more likely have been used immediately thereafter by the Athenians in rebuilding their houses, than left to lie about for nearly a century until the drain wall was built. More probably the cemetery remained intact as a cemetery until nearly the end of the fifth century; its west wall was reconstructed to repair damage done by the barbarians rather than to make a terrace to be used for other purposes, since no traces were found of any house foundations or of any arrangements for water supply of houses of the fifth century. Some new arrangement must have been made to divide off the burial area from the alley to the north.

The survival of the cemetery until late in the fifth century may have been due to reluctance to disturb the dead and to build dwellings over a known burial place, or perhaps to the continuing presence in the neighborhood of a family whose ancestors were buried there. However that may be, no burials were made within the enclosure after the end of the sixth century, and the latest graves date from the years around 500. Of the forty-eight graves found twenty-eight, some perhaps because they had been disturbed or robbed, contained no pottery or grave offerings by which they could be dated. Of the other twenty, one was Geometric, one seventh century, and the remaining eighteen were of the sixth century. The area thus seems to have come into use as a burying place in the eighth century, when a number of burials must have

cotta sarcophagus from Gela, dated at the end of the sixth century, shows the same quarter-round supports at the corners inside as does ours, finished at the top however, with Ionic capitals: *Mon. Ant.* XVII, 1906, p. 138, fig. 102 and p. 630, fig. 442. In Athens most of the marble sarcophagi used in early graves were made by carefully fitting together at the corners flat slabs of marble; but a sarcophagus made by hollowing a single block of marble is mentioned, *Ath. Mitt.* XVIII, 1893, p. 164, from a grave at the Kerameikos, probably of the fifth century. The mouldings of the Agora sarcophagus may best be compared to archaic mouldings of the second half of the sixth century: cf. L. T. Shoe, *Profiles of Greek Mouldings*, Cambridge, Mass., 1936, pl. VIII, 7 and 12, crowning mouldings of archaic altars from Miletus; also pl. V, 1, necking of the earliest of the Ionic capitals of the post-Rhoikos temple at Samos.

been made in addition to the one we found *in situ*.¹¹ For the seventh century we have one grave and a few sporadic fragments of seventh century pottery found in late and disturbed fills on the spot, which may have come from destroyed graves. For the sixth century, and especially the second half of the century, we have a series of graves showing that the area was in constant use as a burying ground, and its enclosure by a peribolos wall is probably to be associated with this period of activity. There is some probability from the superposition of graves and from the disturbance of one by another, that some of the burials were made over a sufficiently long period of time so that the earlier burials had been forgotten when the later were made. In almost every case, however, where graves had been disturbed by other graves, no pottery was found to suggest a date for any of the burials concerned. Four skulls were found either in the upper filling of graves to which they did not belong, or in the late disturbed filling of the graves. If we assign two of these to skeletons of which the skulls were missing as found, there still remain two superfluous skulls to indicate that the area contained burials which have otherwise entirely disappeared. Further, among the forty-eight graves twenty-two were burials, twenty-one cremations, and two were urn-burials of infants; it was undetermined whether the remaining three had been burials or cremations. The number of urn-burials seems disproportionately low, and it is most probable that a number of these, which were often made at shallow depth, have entirely disappeared. Thus, though the probability is very strong that this area beside Areopagus Street was in continuous use as a burying ground from the eighth century through the sixth, the remains of the earlier graves are simply not enough to prove it.

The graves have been numbered chronologically from 1 to 48, though in the case of some of the burials, especially those of the later sixth century, the actual difference in date is so slight that the sequence of numbers can have no special significance. The long series of burials and cremations in which were found no offerings by which they could be dated has been placed at the end of the list by type; some sequences can, of course, be made in cases where earlier graves have been disturbed by later. The remains of burials of the eighth and seventh centuries were too scanty to afford any detailed evidence as to the burial customs of their time, so that the general remarks which follow apply only to the sixth century and are based on the evidence from the eighteen graves to be dated in that century.

Disposition and Orientation of Graves

The three earliest burials made in the sixth century, Graves 4, 5, and 8, lie, respectively, close to the north end, somewhat south of the middle, and near the south

¹¹ It has been suggested elsewhere, *Hesperia*, XVIII, 1949, pp. 276-277 and fig. 1, that this was already a burial plot beside one of the main roads of approach to the town in the eighth century.

end of the cemetery. Thus it would seem that there was no definite outward progression from any one point in the use of the available area, though of course burials made in the sixth century may have been affected by earlier procedure. A glance at the plan, Figs. 1-2, will show that the graves cluster thickly in the western part of the enclosure, leaving the eastern margin beside the street thinly populated. This crowding toward the west was no doubt due to the natural contours of the ground. The cemetery lay on a hillside sloping from east to west; at the west its enclosure wall served also as a retaining wall to support a nearly level terrace. Thus at the west there was a considerable depth of earth, while beside the road at the east the bedrock lay hardly 80 cm. below street level, and in consequence graves made in that area would have been inordinately shallow, or would have had to be made by cutting deep into the

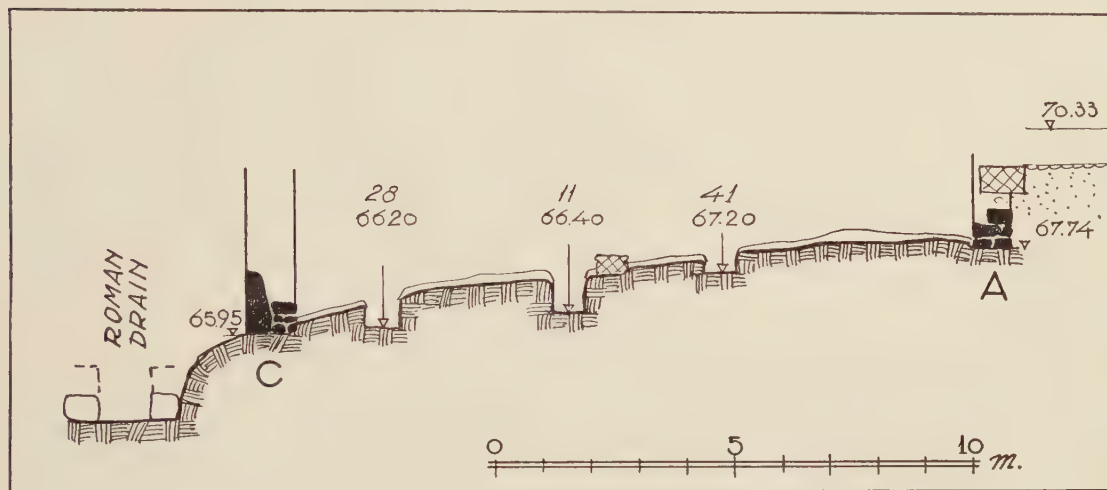


Fig. 4. East-West Section through Archaic Cemetery at A-C, Looking North, Showing Graves 28, 11, and 41.

hardpan (section, Fig. 4). The deepest of our graves was 1.02 m., the deepest of our cremation pits 1.30 m., but in neither case was the full depth of the cutting preserved, and we know from elsewhere, especially at the Dipylon, that burials and cremations were usually made at this time in pits two meters or more deep. The eastern edge of our peribolos seems simply to have been too shallow to be used. The comparative scarcity of burials at the south and southwest, where the earth was deep, is probably due to the destruction of graves by washouts in late Hellenistic times.

Not only the disposition but also the direction of the graves was affected by the terrain; the grave cuttings were in general made either parallel or at right angles to the natural contours. The area lies on a spur of the lower Areopagus slope, which falls not only toward the west but also, at the north, toward the northwest, and at the south toward the southwest. The lines of the graves, following the contours, in consequence lie nearly north-south in the south central part of the area and diverge

slightly from this line to north and south. But within this framework we can find no principle of orientation; in two of the burials which lie roughly north-south, Graves **5** and **15**, the heads were placed in opposite directions, and the same is the case with two of the graves, Nos. **14** and **17**, which lie roughly east-west. In the sixth century it does not seem to have mattered at which end of the grave the head was placed.

Types of Burial: Inhumation and Cremation

Late disturbance at the surface of the grave terrace, in many places going very deep had everywhere destroyed its sixth century ground level. In consequence of this no evidence was found as to whether the burials had been marked in any way, and nothing was found that could be identified as a tombstone or grave-marker. It has already been remarked that the sixth century graves at the Dipylon went to a depth of two meters and more,¹² and that the deepest of our graves was preserved to a depth of only 1.02 m. This suggests that in this particular area (over Grave **4** at the north end of the cemetery) at least a meter of earth below the original ground level had been cut away in later times. The next grave to the east of Grave **4**, No. **16**, lay about 0.80 m. higher, so that if its original depth was as much as two meters, that of Grave **4** must have been considerably more. The ground level of the cemetery was probably about that of the street at the east, perhaps with a gentle downward slope toward the west. The late disturbances were sufficiently deep to obliterate any trace of grave covers, if there ever were any, as well as of markers. Nothing was found in the late debris to suggest that the graves had been covered either with slabs or with tiles, and no slabs suitable for use as grave covers were found built into the later wall foundations. Some of the graves were probably covered with wooden planks set at considerable depth. The lower part of Grave **4**, for example, was lined on all sides of the shaft by a wall roughly built of dry stone to a height of about 0.45 m. above the floor of the grave. The top of this wall may well have served as a ledge on which rested the ends of planks laid across the grave to form a cover. The upper part of the shaft was filled up with earth, and no doubt no other cover was needed. One other grave, No. **11**, showed earth ledges along its long sides, made by narrowing the shaft when a certain depth was reached in digging it. These ledges stood at a height of about 0.40 m. above the floor of the grave and served, like the stone wall lining Grave **4** to a comparable height, to support the sides of a wooden cover. No other grave in which a burial had been made was preserved high enough to show whether or not it had had similar ledges. A wooden cover set about half a meter above the bottom of the grave may have served as a substitute for a wooden coffin. In none of our graves were any nails of iron or bronze found which could have been left after the disintegration of a coffin. Some of the graves, indeed, seem not to have had even a wooden cover as a

¹² Cf. *Ath. Mitt.*, XVIII, 1893, pp. 161 f.

substitute for a coffin; the dead had simply been laid in the bottom of the grave shaft, which was then filled up with earth. The shafts varied in size in accordance with the needs of the individual case; on the average they were about 1.70 to 1.80 m. in length, and about 0.60 to 0.80 m. in width. One of the graves, so disturbed that the dimensions of the shaft could not be measured, contained a skeleton which was only 0.50 m. in length from ankle to shoulder—the head and feet were missing—, evidently that of a half-grown child. Thus it would seem that it was the custom to bury or to cremate both children and adults; infants were buried in any pot large enough to contain their bodies.

The cremation pits follow much the same orientation as do the graves. Like the graves, they have suffered from the disturbances at the surface of the cemetery; the deepest of them has a preserved depth of 1.30 m. At the Dipylon the cremation pits were made to a depth of three meters and more;¹³ our Grave 18, which lies near the extreme west edge of the graveyard and is preserved to a height of 1.30 m., may well have approached such a depth. The shafts made for the cremation of adults are generally somewhat larger than those made for burials, averaging 2 to 2.10 m. in length and 0.80 to 1 m. in width. Not all of the pyres, however, were those of adults; for children the pits were made smaller. The smallest of these was roughly square, measuring only 0.65 by 0.70 m.—evidently the pyre of a very small child.¹⁴ Some of the small pits were carelessly made with curving instead of straight sides. But all of the pits showed from the reddening and hardening of the earth of their floors and walls, which had been baked by fire, that the cremations had taken place on the spot. As at the Dipylon and elsewhere the pits had evidently been dug and filled with wood; the corpse was then laid on the pyre and burned, and any remains settled down with the carbon and ashes into the bottom of the pit, which was then filled up with earth. In one of our graves, No. 18, the deposit of pure ash and carbon overlay the bottom to a depth of 0.30 m., and above that the earth in the grave was heavily sprinkled to a depth of 0.20 m. with an admixture of similar burned matter—the lower deposit presumably being the remains of the pyre which had settled into the pit and the upper the scattered remains from around its edges at the surface which had been swept in afterward.

In five of the pyres were observed long shallow trenches cut in the floor lengthwise down the middle, and in four of the five instances prolonged vertically up the walls of the short ends. Similar shallow slots were observed in pyres at the Dipylon, Vourva and Velanideza in Attica, and interpreted as ducts to bring fresh air down

¹³ Cf. *Ath. Mitt.*, XVIII, 1893, p. 157.

¹⁴ In the fourth century cemetery at Olynthus about one fourth of the cremations were those of children, though there was no evidence for any cremation of infants. The smallest pyre at Olynthus, Grave 260, measured about 0.60 by 0.90 m.—evidently like ours the pyre of a very small child. Cf. Robinson, *Olynthus*, XI, Baltimore, 1942, pp. 145 f.

to the lower part of the pyre and so help the combustion.¹⁵ The logs of wood were apparently laid in the bottom of the pit and built up to the level of the ground or higher; at the Dipylon charcoal from vine trimmings was recognizable. In the bottom of some of our pits charred bits of logs were found, some as much as 20 cm. in diameter; the logs had been laid across the pit from side to side and surmounted by a second series laid across them lengthwise to the pit. In no case did we find any more remains of the bodies than a few scraps of calcined bone; but such scraps were present in almost every pyre.¹⁶ The bodies had been so completely consumed in all our graves that there was no evidence as to orientation. The offerings to the dead, probably the pots which had contained the oil or other unguents used in preparing the body for burial or cremation, were usually found well up in the layer of ash and cinders, as though they had been thrown on the pyre after it had burned down; but they were in most cases themselves badly burned.

Three of the graves, Nos. 8, 47 and 48, contained no traces of skeletons whatsoever; nor did the scanty amount of ash and cinders scattered through their filling seem sufficient to have been left by a pyre. The sides and floors of these pits showed little trace of burning. Of the three only Grave 8 contained pottery, two small vases which show no signs of burning. Nevertheless small amounts of carbonized matter were present, and no traces were found of skeletons. It was not possible to determine whether these had been burials or cremations; one or the other they must have been.

Catalogue of Graves

BURIALS OF THE GEOMETRIC PERIOD (NO. 1)

GRAVE 1

Urn-burial of an infant. Pl. 35d.

The grave had been disturbed at the south by another urn-burial, Grave 3, and from above in Hellenistic times. All that remained was part of the wall of a Geometric amphora which had been laid on its side with the mouth toward the south. The skull and some of the bones of an infant were found in place on the remaining fragment of the amphora; the position of the

body could not be determined. The foot of the amphora had evidently been taken off before it was buried; two stones which were undisturbed in their original position had served to stop the hole. No doubt the body of the dead child had been inserted through this hole made purposely in the bottom of the pot because the mouth or neck was too narrow. Though little was left of the grave, what was preserved was indubitably *in situ*, and affords evidence that the area had been used for burials in Geometric

¹⁵ Cf. *Ath. Mitt.*, XV, 1890, p. 318 (Vourva); XVIII, 1893, pp. 91 f. (Dipylon); *Deltion*, 1890, p. 22 (Velanideza).

¹⁶ Though this was also usually the case at the Dipylon and elsewhere, the body of the dead was not always completely consumed; cf. *Olynthus*, XI, pp. 154 f. Robinson suggests, justly, I think, that wind conditions etc. at the time of the cremation may have affected the efficiency of the fire in consuming the corpse.

times. The bones were those of a child about eighteen months old.¹⁷

Date: probably second half of the eighth century; the overall banding of the body of the amphora is characteristic of late Attic Geometric, and of Protocorinthian. Similar to the amphora from Grave A, above.

1-1. *Fragmentary Geometric Amphora*. Pl. 35c.
Inv. P 15838. Pres. H. 0.40 m.

Mended from many pieces; several do not join. Fragment from the wall of an amphora at one side, from just below the shoulder to just above the foot, which was broken off before burial. A wide zone of solid black glaze, somewhat streaky, around the bottom of the body; above, banding as high as preserved. Attic clay.

DISTURBED BURIALS

Although no other Geometric graves were found intact, there was evidence that at least two other graves of the period had existed in the area of the cemetery.

In the upper filling of Grave 4 a skull was found which did not belong to the skeleton which lay at the bottom of the pit, and in association with this extra skull was found a mass of Geometric sherds which later proved to be fragments of one pot, Pl. 35e. It is difficult to avoid the inference that skull and amphora together belonged to an earlier burial which was disturbed when Grave 4 was made.

A. *Geometric Amphora*. Pl. 35e.

Inv. P 16990. H. 0.737 m. Diam. 0.475 m.

Much of the body and neck, and one handle missing and restored. Plump ovoid body on a high, nearly vertical ring foot; wide neck flaring to a rounded lip; double rolled handles. The body banded, except for the shoulder and a glazed zone above the foot. On the neck front and back a wide zone of checkerboard at the

centre between multiple verticals, some with hatching between them, and flanked at each side by vertical zigzag. In the side panels two sets of concentric circles, one above the other, their centers filled by vertical wavy lines. Coarse buff clay with sandy bits; dull black glaze, much worn and peeled. Late Geometric; characteristic are the plump ovoid body, the nearly vertical foot and the banding over most of the body.

A mass of unburned Geometric sherds was found in the upper filling of Grave 18, a cremation pit of the sixth century. The level at which they lay was above the heavy deposit of burning from the pyre itself, though plentiful charcoal was scattered through the earth filling at this level also. No doubt this filling represented what had been thrown or swept into the pit after the pyre had burned out. The Geometric sherds, which were not burned, mended up to make a homogeneous group of vases such as might well have been offered in a grave of the second half of the eighth century. The near-completeness of three of the pots suggests that they had been dug up only shortly before being thrown into the filling of the pyre, and before many of their fragments could become scattered and lost; perhaps the grave in which they belonged had been destroyed in the digging of Grave 18. Such a grave, No. 22, lay immediately to the south. Only the head and shoulders of the skeleton were preserved; the whole lower part, with the grave offerings, may have been cut through and destroyed in the digging of the pit for the pyre. Unfortunately there was no clear evidence that such had been the case, because the skeleton lay at a high level and the gravelly filling of late Hellenistic times had intruded to the depth of the bottom of the grave, so that even its outlines could not be traced. On the other hand, there was no evidence that the south end of the pit had been cut by a later grave, so that we must assume the

¹⁷ The skeletal remains from the cemetery were examined and identified by J. Lawrence Angel, who kindly supplied the information given here.

skeleton to have been already in place when the pit was made. The fragments, B-I, are of a skyphos, a shallow bowl, three pyxides, two pyxis lids and a small hand-made oinochoe.

B. *Geometric Skyphos*. Pl. 36 B.

Inv. P 15510. H. 0.07 m. Diam. 0.12 m.

Fragments of the body missing, and most of one handle. Low flat base, rounded wall and shoulder, rather high straight rim. Glazed to the handle zone, which is bordered below and at the sides with bands, and decorated with hatched meander. Stars beside the handle attachments. The rim banded. The inside glazed; series of verticals in a reserved line at the rim, and a reserved dot at the center of the floor. Dull black glaze, much peeled.

C. *Geometric Shallow Bowl*. Pl. 36 C.

Inv. P 15511. H. 0.052 m. Diam. 0.172 m.

Much of one side missing, and fragments from the other. Low ring foot and wide shallow rounded body with low vertical rim. Rolled horizontal handles joined to the rim by vertical straps. Bands above and below the handle zone, which is decorated with a row of stars. A row of dots between bands on the rim; similar decoration on the horizontal handles. On the strap handles, banding, interrupted by St. Andrew's crosses in panels. The inside glazed, with concentric glaze rings at the center of the floor, two reserved bands on the wall, and a third, decorated with series of verticals, inside the rim. Attic clay; glaze black to brownish and slightly metallic.

D. *Geometric Pyxis and Lid*. Pl. 36 D.

Inv. P 15512. H. 0.083 m. Diam. est. 0.22 m.

Many fragments missing and restored.

Ring foot, sharply curving body with level of greatest diameter high, and rim flanged to receive lid; the flange pierced by pairs of tie-holes. Around the center of the body a wide zone decorated with hatched meander; above and below, zigzag between bands. The bottom

and the floor inside similarly decorated with concentric bands and dot rings around eight-spoked wheels at the center. The lid fragmentary; a plastic horse for handle. Concentric bands and a ring of dots around the edge; the central area glazed. The horse entirely glazed except for a double reserved band across the chest, reserved stripes on the mane, and the face, which is decorated with a St. Andrew's cross and dots for eyes. Attic clay; black glaze, rather dull and in places much pitted.

E. *Fragmentary Geometric Pyxis and Lid*. Pl. 36 E.

Inv. P 15513. H. 0.075 m. Diam. est. 0.19 m.

A large fragment of the pyxis, preserving the full profile with ring foot, rounded wall and rim flanged to receive the lid. Hatched meander in a wide zone around the middle of the body; above and below, a zigzag bordered by triple bands. Of the decoration of the floor and bottom only concentric bands at the outer edges remain. A small fragment of the lid; on it, at the edge, a dot ring between bands. Attic clay; glaze black to red, and somewhat peeled.

F. *Fragmentary Geometric Pyxis and Lid*. Pl. 36 F.

Inv. P 15514. Diam. at rim est. 0.175 m.

Four non-joining fragments, preserving part of the ring foot, the curved wall and the flanged rim. Glaze above the foot, then bands. Around the body panels filled by hatched quatrefoils with stars between the petals; between panels, three sets of quadruple verticals separated by dot columns. Bands and a row of dots below the rim. On the bottom a hatched quatrefoil, stars between the petals, surrounded by concentric glaze bands and dot rows. The inside unglazed. On the fragment of the flat lid, bands and dot rows near the edge; farther in, wide glazed zones separated by double bands. Attic clay; red glaze.

G. *Fragmentary Geometric Pyxis Lid.* Pl. 36 G.

Inv. P 15516. Diam. est. 0.21 m.

Two non-joining fragments. On the vertical face, diagonals. Two bands at the edge, then a dot row, three bands, a zigzag, three bands, a zone of tangent lozenges, latticed, three bands, a row of dots, three bands, then solid glaze to the handle. Attic clay; dull black glaze, somewhat peeled.

H. *Fragment of Geometric Pyxis Lid.* Pl. 36 H.

Inv. P 15515. Diam. est. 0.14 m.

A single fragment, preserving about one-third of a rather steep convex lid pierced by tie-holes near the edge. Glazed, with three pairs of reserved bands and a zone at the edge filled with diagonals. Attic clay; dull black glaze, much peeled.

I. *Small Hand-made Oinochoe, Fragmentary.* Pl. 36 I.

Inv. P 15517. Pres. H., largest fragment, 0.055 m.

A single fragment preserves part of the front of the rounded body, the upward-tapering neck, and the trefoil mouth. Other fragments are from the wall and from the lower part of the vertical band handle. Hand-made of fine pale buff clay, somewhat micaceous; undecorated.

No further direct evidence for individual graves of the Geometric period was found in the cemetery. In many parts, however, and especially toward the north end of the area, the proportion of Geometric sherds both in the fills disturbed in later times and in the undisturbed filling over bedrock was much greater than is ordinarily encountered. No doubt some of these sherds came from graves of the Geometric period which had been destroyed in later times. None of them was out of the ordinary or worth publication here; they are mentioned merely as additional evidence that our cemetery was in use for burials as early as the eighth century.

BURIALS OF THE SEVENTH CENTURY (NO. 2)

Only one burial was found which can be attributed definitely to the seventh century.

GRAVE 2

Inhumation. Fig. 5 and Pl. 37 b.

Orientation: north-south; head at south.

Dimensions: the outline of the grave cutting could not be determined clearly because of deep late disturbances. The sherds from immediately above the skeleton were late Hellenistic, and an Athenian New Style coin, dating from between 229 and 30 B.C., was found among them.

Skeleton: Outstretched on back, arms extended along sides. Length as it lay, 1.52 m. The skull and pelvis were badly disintegrated, partly because of damp, partly because the grave lay at a high level and just below a floor of Hellenistic times. The skeleton seems to be that of an adult female.

Offerings: three small pots, an olpe, a skyphos and a cup, all at the foot of the grave.



Fig. 5. Grave 2.

Date: The cheap little pots are all subgeometric, and hard to date closely. Parallels from graves in the Phaleron cemetery suggest the first half of the seventh century.

2-1. *Subgeometric Olpe*. Pl. 37 a.

Inv. P 15189. H. 0.123 m. Diam. 0.095 m.

The handle, most of the mouth and part of the wall missing. Small flat-bottomed jug or olpe with short neck curving continuously from the shoulder to the round mouth. Coated outside with thick streaky brownish glaze.

2-2. *Subgeometric Skyphos*. Pl. 37 a.

Inv. P 15187. H. 0.067 m. Diam. rim 0.104 m.

Much of one side, and a chip from the rim opposite, missing. Small flat-bottomed skyphos with sharply tapering wall and very shallow shoulder; offset rim. Covered inside and out with streaky brownish glaze; the rim reserved and roughly banded. A similar skyphos from the Phaleron Cemetery: *A.J.A.*, XLVI, 1942, p. 31, fig. 9.

2-3. *One-handed Cup*. Pl. 37 a.

Inv. P 15188. H. 0.064 m. Diam. 0.106 m.

The handle, part of one side, and chips missing. Small flat-bottomed cup with flaring rim and vertical band handle. Thin streaky brownish glaze inside and out, except on the handle and rim, which are banded. A similar cup from the Phaleron Cemetery: *A.J.A.*, XLVI, 1942, p. 37, fig. 19, 48.2A.

DISTURBED BURIALS

A relatively large number of subgeometric and seventh century sherds was found scattered throughout the disturbed areas of the cemetery, and in some cases in the filling of the sixth century graves. Some of these sherds may have come from burials of which no trace now remains, or have been associated with some of the graves which were found devoid of offerings. Three fragments, J-L (Pl. 37), are worthy of publication here; the first is from a large pot

which could well have been used to contain the body of an infant. The second, part of a fenestrated stand, finds parallels in graves at the Dipylon.

J. *Fragment of Protoattic Amphora or Stamninos*. Pl. 37 c.

Inv. P 16991. Pres. H. 0.315 m.

From the body and lower part of the shoulder of a large closed pot, amphora or stamninos.

On the shoulder, downward-pointed rays, alternately glazed and outlined, with swastikas between them. Below, a zone of step-pattern. Around the body a broad zone decorated with horses: the hindquarters of one preserved, walking right, and at the extreme left part of the downward-bent neck and mane of a second, probably grazing. The mane reserved and filled with fine lines to represent the hair. In the field, pendant hooks, zigzags, chevrons, and vegetable ornament. Coarse incision on the legs of the first horse; traces of white in the outlined rays on the shoulder. "Black and White" style; second quarter of the seventh century.

K. *Fragment of Fenestrated Stand*. Pl. 37 d.

Inv. P 16989. Pres. H. 0.09 m.

The bottom and left side are broken away; at the right the edge of a slot and part of its upper end. A large orientalizing bird right, species unknown. The eye reserved, and the opening of the beak.

L. *Fragment of Protoattic Oinochoe*. Pl. 37 e.

Inv. P 16993. Pres. H. 0.072 m.

Fragment from the front of the neck; at the top is the beginning of the central part of the trefoil mouth. The border at the right edge of the panel preserved, and part of that at the left. In the panel a sphinx walking right; the face, neck, wings, and paws carelessly drawn in outline. Two arm-like objects extend forward from the chest, and what appears to be an auxiliary wing behind the front legs. Below, a zone filled with parallel wavy verticals. Early Protoattic.

BURIALS OF THE SIXTH CENTURY (NOS. 3-21)

Eighteen graves contained pottery by which they could be recognized as of the sixth century. Some of these were inhumation burials, others cremations. The manner of burial and of cremation has been discussed above; the graves have therefore been arranged in chronological order rather than by method of disposal of the body. Details of the manner of burial or cremation may be found by referring in each case to the description of the grave.

It will be seen that the sequence of graves covers the last three quarters of the sixth century. Dating has in general been done by quarter centuries, and where possible it is noted whether a group of pots falls early or late in the quarter. In the case of several graves the latest pot (usually a lekythos) falls into a class represented also in other groups; here the assignment of a number is purely arbitrary and has no particular chronological significance.

GRAVE 3

Urn burial. Pls. 35 d and 38 e.

This burial partly destroyed an earlier one, Grave 1. The amphora lay on its side on a line northwest to southeast; a late disturbance had carried away its mouth, handles and most of its neck. Presumably the mouth of the amphora was covered at the time of burial, but no trace of the cover remained. The bones of a young child were found inside, but the original position of the body could not be determined. It had evidently been inserted through a great hole made in the shoulder of the pot for the purpose because the neck was too narrow. No grave offerings were found.

Date: the burial is later than Grave 1, which it cut through. The coarse amphora cannot be dated closely, though the plump shape and the micaceous fabric find parallels in the first half of the sixth century.

3-1. *Coarse Amphora*. Pl. 38 c.

Inv. P 15454. Pres. H. 0.81 m. Diam. 0.572 m.

About half the body and neck, both handles,

and all of the rim missing. Plump ovoid body on a low flat base with vertical face. Very micaceous pink clay, unglazed.

GRAVE 4

Inhumation. Fig. 6 and Pl. 38 a-b.

Orientation: approximately East-West; head at east.



Fig. 6. Grave 4.

Dimensions: length 2.14 m.; width 1.02 m.; depth as preserved 1.02 m. The lower part of the pit was lined by a rough wall dry-built of small untrimmed stones to a height of 0.45 m. above the floor of the grave. No doubt the ledge made by the top of this wall served to support the sides of a wooden cover laid across. Many small stones which had fallen from the wall were found in the filling of the lower part of

the grave. The dimensions of the pit within the built walls were 1.72 m. by 0.63 m.

Skeleton: outstretched on back, arms extended along sides. Length as it lay, 1.56 m. Female, about 18 years old.

Contents: in the upper filling of the grave was found a skull which could not belong to this burial, since the skeleton at the bottom was complete. Associated with the extra skull was a mass of Geometric sherds, which mended up to the amphora, A, p. 83 and Pl. 35 e. Skull and amphora no doubt came originally from an earlier grave which had been destroyed. Belonging to Grave 4 was a tripod pyxis which lay partly under the skull of the skeleton at its right side.

Date: second quarter of the sixth century.

4-1. *Tripod Pyxis, Corinthian*. Pl. 38 d.

Inv. P 15729. H. 0.051 m. Diam. at top 0.09 m.

Broken but complete save for a few small chips. Rounded bowl supported on three low slightly flaring legs; collar rim, grooved along its vertical face and on top. The legs decorated, two with large birds, right, and the third with a lion, right, an incised blob rosette under his belly. Pale greenish Corinthian clay; the glaze has entirely peeled away, the animals being recognizable only by the incisions.

Although the decoration is entirely gone, parallels for the shape may be cited from the cemetery at Gela: *Mon. Ant.* XVII, 1906, p. 138, fig. 103 and p. 630, fig. 442; these, 1332 and 921 in Payne's catalogue, both dated before the middle of the sixth century (Payne, *Necrocorinthia*, Oxford, 1931, pp. 308 and 323).

GRAVE 5

Inhumation. Fig. 7 and Pl. 38 f. *Hesperia*, IX, 1940, p. 301 and fig. 43.

Orientation: North-South, head at north.

Dimensions: length 1.72 m.; width 0.56 m.

Skeleton: outstretched on back, arms ex-

tended along sides. Length as it lay, 1.50 m. Female, about 31 years old.

Offerings: two pots, both at the north end of the grave. The lydion, No. 1, lay beside the left shoulder; the aryballos, No. 2, to the right of the head.

Date: second quarter of the sixth century.



Fig. 7. Grave 5.

5-1. *Unglazed Lydion*. Pl. 39 a.

Inv. P 15253. H. 0.082 m. Diam. 0.064 m.

Intact. High conical base, shallow turnip-shaped body, outward flaring neck and flat projecting rim. Two wide shallow grooves around the shoulder and two sharply grooved lines at the junction of neck and rim. Wheel-made of highly micaceous buff clay containing occasional white bits, and with a fine buff surface, now much worn. Unglazed.

Not Attic; the micaceous fabric is like that of Grave 10-4, below. Probably an importation from the east, possibly Lydia, though the characteristic "marbling" is lacking and the mica

is not golden in color. (Cf. *Sardis*, I, Leyden, 1922, p. 79; *A.J.A.*, XVIII, 1914, p. 433 f.; XXV, 1921, p. 115; and XXXIV, 1930, p. 421). Rumpf in *Ath. Mitt.*, XLV, 1920, p. 163 f. notes that the Greeks undoubtedly made imitations of the Lydian ointment vases, often using a spreading foot instead of a conical base, and hence the year 546 B.C. in which came the Persian conquest need not be taken as a sharp break in the Lydian fabric. Presumably, however, the earlier imitations are closer to their Lydian prototypes, and therefore examples with conical base should be earlier than ones with spreading foot. As in the necropolis at Samos, Lydia of varying shape, fabric and decoration were found in our cemetery; there is not enough evidence in hand at present to assign the various fabrics to any particular place or places. For Lydia from the Samos cemetery, see Boehlau, *Aus ionischen und italischen Nekropolen*, pl. VIII, nos. 5, 10 and 13.

5-2. *Hand-made Aryballos*. Pl. 39 a.

Inv. P 15252. H. 0.086 m. Diam. 0.077 m.

The body intact, the neck broken and mended; part of the lip, and chips from the shoulder missing. Squat spherical body flattened at the bottom to make a resting surface; narrow tapering neck flaring to the lip, and a wide band handle, shoulder to lip. Hand-made; the neck set slightly crooked. Fine buff clay, slightly micaceous; unglazed. An example of a numerous class found on many sites and made over a long period of time, perhaps locally in a number of places. A comparable example from a sixth century grave is our 12-4 below, Pl. 42 a.

GRAVE 6

Cremation.

Orientation: slightly off East-West.

Dimensions: length 1.50 m.; width 0.55 m.; depth as preserved 0.30 m. The sides and floor of the pit, which was irregular in outline, had been baked hard by the fire. The floor was traversed lengthwise by a shallow channel 16 cm. wide and 10 cm. deep, probably an air

channel for the fire, though we did not find its continuations running vertically up the short ends of the pit. The deposit of ashes and charcoal was up to 30 cm. in thickness.

Skeleton: small bits of calcined bones were found scattered throughout the charcoal; the original position of the skeleton undetermined.

Offerings: two vases, a band-cup and a lekythos, found overlying the burning, as though thrown into the grave when the pyre had died down. Both were complete, but cracked into many fragments, and both burned.

Date: the years around the middle of the sixth century.

6-1. *Black-Figured Lekythos*. Pl. 39 b.

Inv. P 15376. H. 0.117 m. Diam. 0.073 m.

6-2. *Black-Figured Band-Cup*. Pl. 39 b.

Inv. P 15377. H. 0.125 m. Diam. 0.208 m.

Both vases have been published by Vanderpool, *Hesperia*, XV, 1946, p. 127, no. 11 and p. 131, no. 20.

GRAVE 7

Cremation. *Hesperia*, IX, 1940, p. 304 and fig. 44.

Orientation: East-West.

Dimensions: length 1.10 m.; width 0.40 m.; depth as preserved 0.32 m. Sides and floor of the pit were baked hard by the fire. The pit was full to the top with ashes and charcoal fragments of charred logs up to 16 cm. in diameter were recognizable.

Skeleton: fragments of charred bone scattered throughout the charcoal; position and orientation of the skeleton not determined.

Offerings: one lekythos lying on the floor of the pit. It was intact save for a hole through its bottom; evidently the bottom had been knocked out before it was thrown on the pyre.

Date: probably just after the middle of the sixth century.

7-1. *Black-Figured Lekythos*. Pl. 40 b.

Inv. P 15374. H. 0.123 m. Diam. 0.06 m.

Intact save for a chip from the foot and a

hole through the floor. The surface burned and the glaze greyed. Elongated egg-shaped body, narrow at the top. Wide flaring ring foot; a shallow ring between shoulder and echinus mouth. Foot, bottom of body, mouth, and neck-ring glazed. On the shoulder a chain of linked lotus buds, pointed downward. On the body a siren with spread wings, right, between two lions; a swan under the handle at the back. Neat incision. Purple: a narrow line on the upper edge of the lip, two on the outer face of the rim, another on the neck-ring, two below the figured scene, fillet, wing-bands and tail of siren, snouts of lions, and bands on wings of swans.

The lekythos belongs to Miss Haspels' Sub-Deianeira type; cf. Haspels, *Attic Black-figured Lekythoi*, Paris, 1936, pp. 25 f. The animal frieze decoration running clear around the body, and the plump shape without a neck, suggest a fairly early date, perhaps just after the middle of the century.

GRAVE 8

Type of grave undetermined. Pl. 40 c.

Orientation: East-West.

Dimensions: length 1.65 m.; width 0.95 m.; depth as preserved 0.30 m. A few cinders were found scattered through the filling of the pit, and a few bits of burned bone, but there was no heavy deposit of charcoal at the bottom and the sides showed no signs of burning. The pots found at the bottom are unburned.

Skeleton: no traces.

Offerings: two miniature pots, a plemochoe and a spouted bowl, found one at the east and one at the west end of the grave near its mid-line.

8-1. *Spouted Bowl*. Pl. 39 c.

Inv. P 16583. H. 0.041 m. Diam. 0.073 m.

Intact. Flaring ring foot, grooved half-way up; rounded body and flat rim, slightly projecting. A spout at the front, and two upstanding rolled handles. Glazed to the handle-zone;

vertical strokes on the reserved shoulder and blobs on the handles. The upper face of the rim decorated with strokes. The inside glazed to the shoulder.

8-2. *Plemochoe*. Pl. 39 c.

Inv. P 16584. H. 0.033 m. Diam. 0.066 m.

Intact. High flaring foot and sharply curved body with down-turned rim inside. No handle. Glazed to the shoulder, which is reserved and decorated with a row of dots between narrow bands of red. The inside glazed.

The miniature vases from this grave are difficult to date; the relatively high and rather sharply flaring ring foot common to both suggests an early rather than a late dating, perhaps before the middle of the century.

GRAVE 9

Inhumation. Pl. 40 d, (right)

Orientation: Northwest-Southeast; head to northwest.

Dimensions: length 1.70 m. +; width 0.68 m.

Skeleton: outstretched on back, arms extended along sides. Length as it lay 1.52 m. Male, about 15 years old.

Offerings: one cup, at the foot of the grave.

Date: just after the middle of the century.

9-1. *Black-Figured Band Cup*. Pl. 40 e.

Inv. P 15730. H. 0.055 m. Diam. 0.105 m.

Intact. Cup foot with vertical edge, very short stem surrounded by a moulded ring, deep bowl with offset rim. Black glaze over all except the handle-zone, a narrow reserved line below it, and the outer edge of the foot. In the handle-zone a chain of lotus buds, their stem intertwined.

Very similar in shape and decoration to a Droop cup, *J. H. S.*, LII, 1932, p. 56, fig. 1, except for the lack of stem and the foot profile. Just after the middle of the sixth century.

GRAVE 10

Inhumation. Fig. 8 and Pl. 40 a. *Hesperia*, IX, 1940, pp. 301 f., and figs. 41-42; *A.J.A.*, XLIII, 1939, p. 588 and fig. 20.

Orientation: North-South; head at north.

Dimensions: length 1.70 +; width 0.68 m. The whole length of the grave could not be measured because its north end was built over by a late wall.

Skeleton: outstretched on back, arms extended along sides. Length as it lay, 1.52 m. Probably male; 16-17 years old.

Offerings: seven pots. By the left foot, two black-figured lekythoi, Nos. 1, 2; another, No. 3, at the northwest corner of the grave, above the head. At the northeast corner an un-

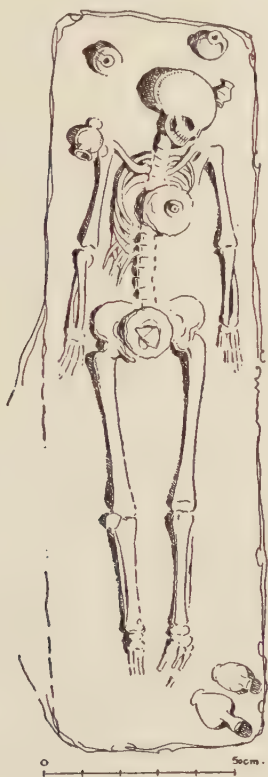


Fig. 8. Grave 10.

decorated lekythos, No. 4. Beside the right shoulder a plain lydion, No. 5, and another

partly under the skull, No. 6. A third lydion, No. 7, lay 18 cm. above the chest of the skeleton, and at the same level to the south, over the pelvis, lay part of a small skull, probably that of a child. Our grave may have contained a double burial.

Date: third quarter of the century, probably fairly early in the quarter.

10-1. *Black-Figured Shoulder Lekythos*. Pl. 41 a.

Inv. P 15262. H. 0.124 m. Diam. 0.074 m.

Mended from several pieces; chips missing from wall and lip. Plump shoulder lekythos. On the shoulder six ivy leaves. On the body a nude runner left, with a draped onlooker to either side; drapery hanging from shoulder line. Red for a ring around the neck, the hair of all three figures, drapery ends, and dots on dresses.

"Fat Runner Group"; cf. Haspels, *A.B.L.*, pp. 16-18. No. 7 on her list decorated like ours with ivy leaves on the shoulder. Much like our lekythos is a little oinochoe from Rhitsona: Ure, *VI and V Century Pottery from Rhitsona*, Oxford, 1927, pl. XII, 120.121. Third quarter of the century.

10-2. *Black-Figured Shoulder Lekythos*. Pl. 41 a.

Inv. P 15263. H. 0.108 m. Diam. 0.066 m.

Mended from many pieces, a few chips missing; a large part of the surface peeled away. Plump body similar to 10-1. On the shoulder a bird with spread wings, right; the surface to each side peeled. On the body, two nude riders, opposed; of the one at the left only the head and forelegs of the horse are preserved, the rest peeled away. Purple: band on lip, around neck, and ground line, mane and haunch of horse, and hair of rider. Considerable fine incision, carefully done.

Careful work of just after the middle of the century; compare Haspels, *A.B.L.*, pls. XI-XII, Athens 372.

10-3. Black-Glazed Shoulder Lekythos. Pl. 41 a.

Inv. P 15264. H. 0.13 m. Diam. 0.08 m.

Mended from many pieces; small fragments missing, and surface partly peeled. Plump body similar in shape to 10-1 and 2. Glazed to the level of the handle attachment; the shoulder reserved and undecorated. A purple band around the neck.

10-4. Unglazed Lekythos. Pl. 41 a.

Inv. P 15261. H. 0.158 m. Diam. 0.073 m.

Mended from many pieces; small fragments missing. Tall thin ovoid body on a flaring base, slightly concave underneath. Thickened lip with rounded profile; heavy band handle. Thick fabric of very micaceous buff clay, unglazed.

Not Attic; the fabric much the same as that of the lydion 5-1. Lekythoi of similar shape have been found at Sardis and in Samos: *Sardis*, I, p. 80 and fig. 75 b, upper row, fourth from left; Boehlau, *Aus ionischen und italischen Nekropolen*, pl. VII, 5. The fabric of both sites is notably micaceous. Our lekythos is certainly an import from the east.

10-5. Unglazed Lydion. Pl. 41 a.

Inv. P 15266. H. 0.068 m. Diam. 0.065 m.

Intact. Echinus foot and double conical body, the lower part meeting the upper at a sharp angle. Short straight neck and broad flat lip, projecting. Wheel-made of fine pinkish-buff clay, unglazed. The fabric could be Attic.

10-6. Banded Lydion. Pl. 41 a.

Inv. P 15265. H. 0.105 m. Diam. 0.07 m.

Intact except for small chips. Turnip-shaped body on a high conical base slightly hollowed beneath; outward flaring neck and flat projecting lip. Wheel-made of clay which is pink at the core, brownish at the surface, and grey where the surface has peeled away. Decorated with bands of somewhat metallic black glaze, in places thin and streaky: a wide band at the level of greatest diameter, a narrower one be-

low, and two on the shoulder. The base and the bottom of the body solidly glazed, as also the upper and outer faces of the rim. The banding rather carelessly done.

10-7. Glazed Lydion. Pl. 41 a.

Inv. P 15267. H. 0.063 m. Diam. 0.048 m.

Intact except for small chips. Similar in shape to 10-6, but smaller, and with lower base, slightly angular shoulder and thicker rim. Fine pinkish-buff clay, wheel-made. Coated over all except the base and the body just above it with streaky brown glaze, black where thick.

The three lydia show considerable variation in shape, fabric and decoration. For all three examples parallels may be found in the Samos cemetery: Boehlau, *Aus ionischen und italischen Nekropolen*, pl. VIII, 13 (for our No. 5), VIII, 10 (for our No. 6) and VIII, 5 (for our No. 7). Again different in fabric is our 5-1. Possibly Lydian are 5-1 and the lekythos 10-4; the other examples should then be Greek imitations, 10-7 a fairly close one if the streaky glaze on its surface be taken to copy the "marbling" of the Lydian prototypes. The bibliography of lydia is given above, under 5-1.

GRAVE 11

Inhumation. Fig. 9 and Pl. 41 b.

Orientation: Northeast-Southwest; head to northeast.

Dimensions: length 1.75 m.; width 0.62 m.; depth as preserved 0.85 m. At a height of 0.40 m. above the floor of the grave were narrow ledges along its long sides, left when the pit was cut, perhaps to support the edges of a wooden cover laid over the burial.

Skeleton: outstretched on back, arms extended along sides. Length as it lay, 1.56 m. Male, about 34 years old.

Offerings: one black-figured lekythos, overlying the left ankle.

Date: about 530 B.C.

11-1. *Black-Figured Shoulder Lekythos*. Pl. 41 c.

Inv. P 15654. H. 0.135 m. Diam. 0.074 m.

The foot broken off and mended; otherwise intact, but the surface worn and somewhat peeled. A shallow groove around the neck, and traces of a glaze band over it. On the shoulder



Fig. 9. Grave 11.

elongated buds or petals, pointed downward and separated by dots. On the body a siren with outspread wings, right; to either side a panther with head turned to face. The space under the handle blank. Traces of purple for ground line, necks of panthers, and face of siren.

A comparable lekythos decorated with animals (siren between two lions) and dated about 530 B.C.: Würzburg 358, Langlotz, *Griechische Vasen in Würzburg*, Munich, 1932. Ours may be a trifle earlier.

GRAVE 12

Inhumation. Pl. 42 c. *Hesperia*, X, 1941, pp. 1 f. and fig. 1.

Orientation: North-South; head to north.

Dimensions: length 1.55 m.+; width 0.80 m.

When the grave cutting was made there evidently had been an earlier cutting, perhaps that of another grave, at the south. This earlier pit was approximately square, measuring 0.70 by 0.78 m., and lying at an angle to the later grave. Three of its corners could be distinguished, two at the south ends of the long sides of the grave, and the third to the south. The two cuttings together, grave and earlier pit, make a pit shaped something like a blunt arrowhead, with a total north-south length of 2.30 m.

Skeleton: outstretched on back with arms extended along sides. The bones of the lower legs and feet had disappeared; the skeleton measured 1.40 m. in length as it lay, from mid-shin to top of skull. Probably female, 20 to 25 years old.

Offerings: seven pots. A large lekythos, No. 1, lay beside the left hip; a smaller one, No. 2, overlay the left shoulder; and another, No. 3, crushed into many fragments, lay just over the right knee, with a small aryballos, No. 4, beside it. A pyxis, No. 5, lay in fragments near the position of the left foot; its lid lay near the bowl, No. 6, beside the left knee; and a mesomphalic phiale, No. 7, overlay the right knee. The pyxis-lid contained a shiny greenish substance, slightly oily to the touch, which had formed into loose irregular lumps. This material was analyzed as green earth such as was often used as a pigment, perhaps for cosmetic. On heating it turns reddish brown; it may have been used as reddening cosmetic, lumps being heated as needed.¹⁸

Date: beginning of last quarter of the century.

¹⁸ I owe the analysis to Miss Marie Farnsworth. Dr. Shear in *Hesperia*, IX, 1940, p. 1 mentions this substance as red ferric oxide used for rouge; Miss Farnsworth points out that it is not ferric oxide and suggests that some mix-up in samples has occurred. On cosmetics see Shear's article, "Psmythion," in *Classical Studies Presented to Edward Capps*, Princeton, 1936, pp. 314 f.

12-1. Black-Figured Shoulder Lekythos. Pl. 42 a.

Inv. P 16586. H. 0.177 m. Diam. 0.092 m.

Complete save for a chip from the handle, but the surface badly peeled. Shoulder lekythos with a low raised ridge at base of neck. Long tongues or rays on the neck, and a fringe of short strokes pendant from it at the top of the shoulder. On the shoulder, palmettes with interlacing stems, circumscribed by tendrils, and alternating with small lotus flowers. On the body, Herakles wrestling with Triton; a bearded draped figure runs up from the left, a draped onlooker stands at the right. Five dolphins in the field. Plentiful incision, carefully done. Purple: band on lip and below figured scene, on the beard and fillet of Triton, and for a band on his tail, for the lion-skin cap of Herakles, and for stripes on the drapery of the figures to right and left. White on the belly and tail of Triton, and for the foot and face of the figure standing at right.

In shape our lekythos is comparable to those from Grave 17, 1-2, and to another also decorated with Herakles and Triton, illustrated in *A.B.L.*, pl. 13,2, and dated by Miss Haspels toward the close of the third quarter of the century. Another comparable scene of Herakles and Triton on a black-figured amphora: Würzburg 263, Langlotz, *Griechische Vasen in Würzburg*, pls. 80, 84.

12-2. Black-Figured Shoulder Lekythos. Pl. 42 a.

Inv. P 16587. H. 0.124 m. Diam. 0.07 m.

Intact but the surface much worn and peeled. On the shoulder a three-petalled palmette standing on o's which are dotted with white, an ivy leaf at either side. On the body a nude figure left, between draped onlookers. Traces of purple on lip, on ring at base of neck, and for ground line.

The shoulder decoration is noted by Miss Haspels, *A.B.L.*, p. 67. A comparable conversation scene: Würzburg 303, Langlotz, *Griechische Vasen in Würzburg*, pl. 107.

12-3. Black-Figured Shoulder Lekythos. Pl. 42 a.

Inv. P 16588. H. 0.12 m. Diam. 0.071 m.

Badly shattered with many small pieces missing. Similar to 12-2 in shape and decoration, somewhat plumper.

12-4. Hand-Made Aryballos. Pl. 42 a.

Inv. P 16592. H. as restored, 0.065 m. Diam. as restored, 0.051 m.

Extremely fragmentary; much of the body and part of the handle missing. Spherical body and narrow neck flaring to plain lip; wide vertical handle. Hand-made of buff clay and undecorated.

12-5. Black-Figured Pyxis and Lid. Pl. 42 a-b.

Inv. P 16591. H. of pyxis 0.038 m.; H. over all 0.047 m. Max. diam. 0.084 m.

The lid intact save for a chip; the pyxis missing fragments of its wall and rim. The pyxis made with straight wall slightly inset from the edge of the floor, leaving a ledge to receive the lid. The projecting ledge painted purple; a wide glaze band on the wall inside and out, just below the lip; and a glaze ring around the center of the floor. The lid made with a straight wall and very slightly convex top, projecting a little beyond the wall, and grooved near the edge. On top, a bird with spread wings in flight; glaze at the edge. On the side, wide glaze bands near the top and bottom, and key-pattern with squares inside its bays. Purple for a band around the top at the edge, and for narrow lines on the glaze bands on the side wall. No incision.

Clay and fabric are Attic; the shape is that of the Late Corinthian powder pyxides dating after the middle of the sixth century: cf. Payne, *Necrocorinthia*, pp. 294 and 333. The example from Gela, *Mon. Ant.*, XVII, 1906, p. 313, fig. 232 is later than ours.

12-6. *Black-Glazed Bowl.* Pl. 42 a.

Inv. P 16590. H. 0.055 m. Diam. 0.124 m.

Intact save for a chip from the rim. Flaring ring foot and shallow body; a reserved groove below the rim. The rim flanged at its inner edge to hold a lid. Black glaze over all save the groove below the rim; the upper face of the rim and outer face of the flange reserved and painted purple. A double band of purple around the center of the floor, and two more halfway to the rim inside.

12-7. *Phiale Mesomphalos.* Pl. 42 a.

Inv. P 16589. H. 0.045 m. Diam. 0.14 m.

Intact save for a small chip from the lip. Shallow convex body with a straight rim slightly flared at the lip. The large round omphalos hollow underneath. The outside unglazed below the rim, which is glazed inside and out. Glaze on the omphalos, and a fringe of short strokes around it. Four figures, alternating with four grapevines bearing leafy tendrils and large white bunches of grapes. The figures consist of two draped bearded men seated right on folding stools and holding drinking horns, and two nude bearded men left, semi-reclining on the ground with wineskins behind them. Their shoulders and chests are adorned with white garlands, and the wineskins with white bands. No incision or purple.

The shape is normal for phialai of the second half of the century; one found in a well at Corinth was, like ours, unglazed outside except for the rim: *Hesperia* VII, 1938, p. 569, no. 7. Phialai are commonly decorated in Six's technique or simply glazed black; examples with figured decoration are not common.

GRAVE 13

Inhumation. Fig. 10.

Orientation: East-West; head at east.

Dimensions: length 2.00 m.; width 0.66 m.

Skeleton: outstretched on back, arms extended along sides. The bones were very much

rotted by the damp, and soft. Length as it lay 1.59 m. Adult; sex uncertain.

Offerings: two lekythoi, one at each side of the head.

Date: near the beginning of the last quarter of the century.



Fig. 10. Grave 13.

13-1. *Black-Figured Shoulder Lekythos.* Pl. 43 a.

Inv. P 15431. H. 0.115 m. Diam. 0.072 m.

Small fragments of the wall missing. Glazed to the shoulder, and on the rim; the neck reserved and decorated with a band of purple, and the shoulder reserved and decorated with a chain of lotus flowers and buds pointed downward, their stems interlacing. The side petals of the flowers added in white. Reddish-brown glaze, much worn and peeled.

13-2. Black-Figured Shoulder Lekythos. Pl. 43 a.

Inv. P 15430. H. 0.137 m. Diam. 0.076 m.

The handle and fragments of the body missing. A shallow groove at the base of the neck, decorated with a band of purple; a fringe of short strokes below. On the shoulder, leaves or stemless lotus buds pointed downward, blobby dots between. On the body, six figures: three at the left, a draped between two nude figures, face a similar trio at the right. Careless drawing and scanty incision. Added purple for a ground line, fillets around the heads, and a spot, perhaps accidental, on the dress of the draped figure at the left.

Both of the lekythoi from Grave 13 are of the plump early shape, and neither is decorated with the stereotyped shoulder ornament common toward the end of the century. The figures on 13-2 seem hasty and careless rather than late; these lekythoi probably date from near the beginning of the last quarter.

GRAVE 14

Inhumation. Fig. 11 and Pl. 43 b.

Orientation: East-West; head at west.

Dimensions: length 1.70 m. +; width 0.66 m. The east end of the grave was cut into by the foundation of a later wall, and the full length of the cutting was therefore not preserved.

Skeleton: outstretched on back, arms extended along sides. The feet and lower legs were destroyed by the late wall foundation. Probably female, 35 to 40 years old.

Offerings: one lekythos, lying near the right thigh.

Date: last quarter of the sixth century.

14-1. Black-Figured Shoulder Lekythos. Pl. 43 c.

Inv. P 15375. H. 0.129 m. Diam. 0.064 m.

Fragments of wall and shoulder missing. On the shoulder a cock, left, between ivy leaves.

On the body a draped figure seated on a stool, right, and a nude figure walking right and looking back carrying a bit of drapery over one arm and a spear in the other hand. A draped on-

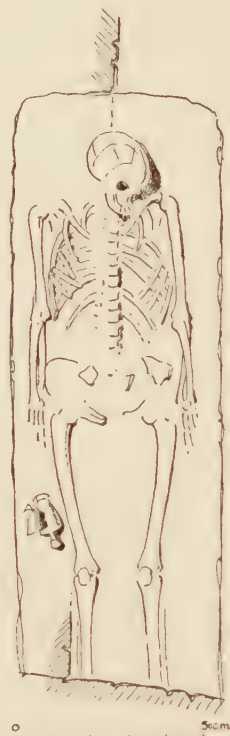


Fig. 11. Grave 14.

looker at either side; a bit of drapery hangs between the two central figures. Scanty careless incision. Purple for ground line, head fillets of all four figures, spots on dress of seated figure, stripes on hanging drapery and dresses of on-lookers. Cock Class, late sixth century; cf. Haspels, *A.B.L.*, p. 67.

GRAVE 15

Inhumation. Fig. 12 and Pl. 44 b.

Orientation: North-South; head to south.

Dimensions: the grave had been disturbed and its outlines were not clear. All of the upper part had been cut through by a late wall foundation.

Skeleton: Only the lower half preserved. The body had been laid on its back, probably with the knees and the legs drawn up. The leg bones were found bent at the knees as they had fallen, giving the appearance of a jumping-jack. The skeleton measured 0.50 m. from shoulder to ankle; clearly that of a child.

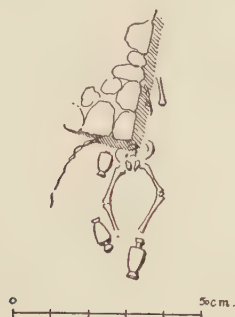


Fig. 12. Grave 15.

Offerings: three lekythoi. Two, Nos. 1-2, lay beside the feet at either side; the third, No. 3, lay beside the pelvis at the right, cut through by the wall foundation. A large fragment of a flat tile lay immediately above the grave, but not in its original position if it had been placed as a cover over the burial.

Date: last quarter of the sixth century.

15-1. *Black-Figured Shoulder Lekythos.* Pl. 44 a.

Inv. P 15455. H. 0.144 m. Diam. 0.065 m.

Intact except for chips around the lip. On the shoulder, a cock, left; an ivy leaf to either side. On the body, combat of three warriors: the two outer ones face center; the central one runs right, looking back. All wear helmets and carry shields, but no arms are represented. A little crude incision. Purple for the cock's comb and three stripes on his body, for fillets around the helmets of all three warriors and the straps across their chests, on crest of warrior at left, and for spots on shields and drapery where it hangs below the corselets.

Cock Class; cf. 14-1. Though the shape is

late, the quality is not so extremely low as that of many examples of this class; probably to be dated near the end of the sixth century.

15-2. *Black-Figured Shoulder Lekythos.* Pl. 44 a.

Inv. P 15456. H. 0.144 m. Diam. 0.067 m.

Small chips missing; the shoulder and right side of the body much chipped and peeled. On the shoulder a large cock right, with an ivy leaf to either side. On the body a hoplite leaving home; the warrior, fully armed, stands facing a draped figure seated on a stool; an onlooker at either side. Crude painting and incision. Purple: five bands on the body of the cock, fillets (except of seated figure), dots on shield and stripes on drapery.

Cock Class, as 15-1. Very close to our 17-4 below.

15-3. *Black-Figured Shoulder Lekythos.* Pl. 44 a.

Inv. P 15457. Pres. H. 0.073 m.

Only the lower part preserved. On the body, the lower parts of four figures: at the center two nude figures with spears, moving right between draped onlookers. Purple stripes on drapery of side figures.

The Cock Class lekythoi suggests a date for our grave toward the end of the sixth century.

GRAVE 16

Inhumation. Fig. 13 and Pl. 44 c.

Orientation: East-West; head at west.

Dimensions: length 1.70 m.; width 0.55 m. The north side of the grave had been disturbed, and the east end cut away.

Skeleton: outstretched on back, arms extended along sides; the legs were missing. Male, about 39 years old.

Offerings: two lekythoi, No. 1, complete, beside the head at the right, the other, No. 2, fragmentary at the left.

Date: late sixth century.

16-1. Black-Figured Shoulder Lekythos. Pl. 44 d.

Inv. P 15648. H. 0.11 m. Diam. 0.057 m.

Intact except for chips. On the shoulder a three-petalled palmette, dots between the petals, and an ivy leaf at either side. On the body a draped woman running right between two on-lookers, hanging drapery behind her. Careless

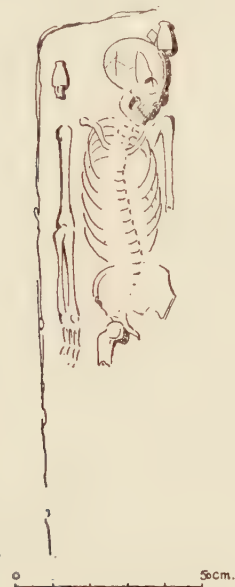


Fig. 13. Grave 16.

drawing and scanty coarse incision. Traces of purple for head fillets and stripes and dots on drapery.

The shoulder decoration of such late sixth century lekythoi is discussed by Miss Haspels, *A.B.L.*, p. 67; cf. also her pl. 19,2.

16-2. Black-Figured Shoulder Lekythos. Pl. 44 d.

Inv. P 15649. Pres. H. 0.10 m. Diam. 0.065 m.

Neck, handle and shoulder missing, as well as part of the wall at one side. At the center of the body Herakles grappling with the lion; a standing draped figure to either side, but the one at the left turns his back to Herakles.

Rather neat incision; purple on hair and beard of Herakles, the mane of the lion, and for stripes on drapery.

GRAVE 17

Inhumation. Fig. 14 and Pl. 45 b.

Orientation: slightly off East-West; head at east.

Dimensions: length not preserved; width 0.90 m. Late (Hellenistic) disturbance has reached to the level of the floor of the grave at its west end.

Skeleton: outstretched on back, arms extended along sides. The bones had become

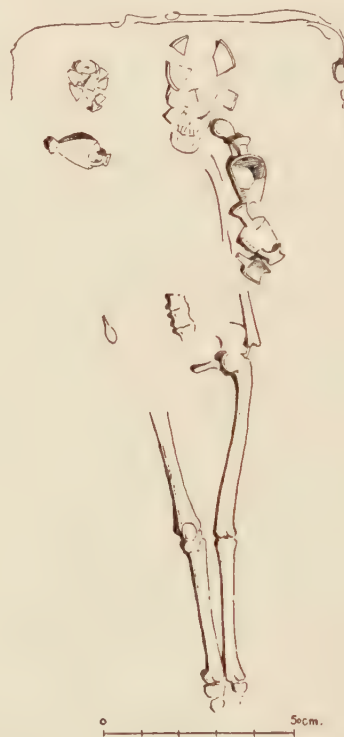


Fig. 14. Grave 17.

rotted and very soft from damp; the right arm, the ribs, and much of the pelvis had disappeared entirely. Male, about 40 to 50 years old.

Offerings: five black-figured lekythoi of which two, Nos. 1-2, lay beside the head to its right,

the other three, Nos. 3-5, were beside the left arm; and a small bronze spoon, No. 6, lay just above the hip on the floor of the grave at the right side.

Date: near the end of the sixth century.

17-1. *Black-Figured Shoulder Lekythos.* Pl. 45 a.

Inv. P 15247. H. 0.194 m. Diam. 0.09 m.

Mended from many pieces; small fragments missing. Shallow groove at junction of neck and body. On the shoulder a five-petalled palmette, three black and two red petals alternating, two o's at base; a draped onlooker at either side. On the body, armed hoplite, left, leaving home; two draped onlookers at either side. Scant incision, rather cursory. Added purple: line at edge of lip, at junction of neck and shoulder, and at outer edge of foot, two lines below figured scene. Also on helmet and greaves of the hoplite, and touches on the drapery of the onlookers on shoulder and body. White is used for the crest of the helmet and for the shield device (dolphin).

A good example of Miss Haspels' "hoplite leaving home" group: cf. *A.B.L.*, pp. 66-67, and 205. Very close to a lekythos dated about 530 now in Belgrade: *Jahreshefte*, 28, 1933, p. 185, fig. 102.

17-2. *Black-Figured Shoulder Lekythos.* Pl. 45 a.

Inv. P 15248. H. 0.194 m. Diam. 0.092 m.

Small fragments missing; the surface badly peeled. Closely similar to 17-1, and belonging to the same group. Slight variations: the shield is bordered with purple; the greaves are left black. The shield device was a white dolphin.

17-3. *Black-Figured Shoulder Lekythos.* Pl. 45 a.

Inv. P 15251. H. 0.145 m. Diam. 0.068 m.

Largely complete; a few chips missing and the surface much peeled. On the shoulder a cock right, with an ivy leaf to either side. On the body a satyr pursuing a draped nymph to

the right; a draped onlooker at either side. A glazed line at the base of the neck. Purple at edge of lip, as ground line below figured scene, for tail and beard of satyr, fillet of nymph, her bodice and spots on her skirt, also for fillets and touches on drapery of onlookers.

Comparable in shape to Nos. 1-2 but somewhat later and belonging to Miss Haspels' Cock Class: near the end of the century.

17-4. *Black-Figured Shoulder Lekythos.* Pl. 45 a.

Inv. P 15249. H. 0.15 m. Diam. 0.074 m.

Part of the lip and fragments of the body missing. On the shoulder a large cock right, with an ivy leaf to either side. On the body, hoplite leaving home. The warrior, left, faces a draped figure seated on a folding stool; a draped onlooker at either side. A little coarse incision. Purple: three bands on body of cock, fillets around warrior's helmet and heads of other figures, touches on dresses of draped figures, rim and device (missing except for an edge) of shield.

Comparable to the "hoplite leaving home" group of 1-2. The decoration of the shoulder like that of the Cock Class.

17-5. *Black-Figured Shoulder Lekythos.* Pl. 45 a.

Inv. P 15250. H. 0.155 m. Diam. 0.072 m.

Small fragments missing and almost the entire surface peeled away. Traces remain on the shoulder of a large cock decorated with purple bands; on the body, of a folding stool and the skirt of a figure seated on it, and of two figures to the right, one of them perhaps carrying a shield. This lekythos appears to have been the twin of 17-4.

17-6. *Bronze Spoon.* Pl. 45 a.

Inv. B 696. L. 0.07 m. W. of bowl 0.024 m.

Complete, somewhat corroded. A very shallow oval bowl with a stem rectangular in section and flattened at the outer end, where it is pierced horizontally by a small round hole.

GRAVE 18

Cremation.

Orientation: Northeast-Southwest.

Dimensions: length 1.84 m.; width 1.04 m.; depth as preserved 1.30 m. The floor and sides of the pit were reddened and hardened by fire. To a depth of 0.80 m. the filling of the pit was of red earth with a thin sprinkling of charcoal throughout; this must have been thrown in to fill the pit after the cremation. Below and to a depth of 0.20 m. the charcoal became much thicker, and the last thirty centimeters to bottom was a pure deposit of ash and charcoal, scattered through which were small fragments of burned bone. An abundance of Geometric sherds was found scattered through the two upper layers, mostly in the second; these appear above, pp. 83-85 and Pl. 36, B-I. Undoubtedly they came from an early grave disturbed when the pit was made for the pyre of Grave 18. None of the Geometric pottery shows signs of burning.

Skeleton: no traces, save for small bits of bone scattered through the burned deposit.

Offerings: a lekythos and a bowl found cracked, but with all the pieces together in the lowest deposit.

Date: late sixth century.

18-1. *Black-Figured Shoulder Lekythos*. Pl. 45 c.

Inv. P 15508. Pres. H. 0.11 m. Diam. 0.073 m.

The foot and fragments of the body and shoulder missing. Much burned. On the shoulder a palmette with three petals, an ivy leaf to either side. On the body a nude figure, between two draped onlookers. Traces of added color for ground line and fillets around heads of figures. The shoulder decoration and conversation scene as on 19-5 below.

18-2. *Black-Glazed Bowl*. Pl. 45 c.

Inv. P 15509. H. 0.065 m. Diam. 0.106 m.

Small bits missing; much burned and peeled.

Flaring ring foot and deep body thickened and flanged at the rim to hold a lid. Glaze over all except for a reserved zone above the foot decorated with rays.

GRAVE 19

Cremation. Pl. 46 b.

Orientation: Northeast-Southwest.

Dimensions: length 2.28 m.; width 1.19 m.; depth as preserved 0.44 m. An air-channel 0.27 m. wide and 0.11 m. deep runs down the middle of the short ends of the cutting and extends the entire length of its floor. The earth of the sides and floor baked hard by the fire which was burned in the pit. At the bottom was a heavy deposit of ash and charcoal and fragments of a number of large charred logs were in place, running across the width of the pit.

Skeleton: no traces, save for small fragments of burned bone scattered throughout the burned deposit.

Offerings: seven pots: five lekythoi, a lydion and a one-handled cup. All were badly shattered and burned, but the fragments of each lay together where the pot had been thrown into the pyre.

Date: late sixth century.

19-1. *Black-Figured Shoulder Lekythos*. Pl. 46 a.

Inv. P 15440. Pres. H. (to neck) 0.12 m. Diam. 0.084 m.

Mended from many pieces; neck and mouth missing and large parts of the body and shoulder, especially at the front. Plump shoulder lekythos, badly burned. On the shoulder a sphinx or siren right, with a draped onlooker at either side. The head and part of the wing of the central figure preserved. On the body a draped figure right, seated on a folding stool between two onlookers. Scanty incision, rather careless. Traces of purple on the drapery of the onlookers; of white on the wing of the siren and the face of the onlooker at the left of the body.

Careless work, badly preserved; the plump shape and the figure decoration on the shoulder suggest a date not very late in the second half of the century.

19-2. *Black-Figured Shoulder Lekythos.* Pl. 46 a.

Inv. P 15439. H. 0.133 m. Diam. 0.075 m.

Badly burned; fragments missing from shoulder and body. On the shoulder a palmette, an ivy leaf to either side. On the body three draped figures in conversation, two left and one right; hanging drapery between them. A little coarse incision; traces of purple for ground line and for stripes on drapery.

The shoulder decoration is characteristic of a large class of late sixth century lekythoi: cf. Haspels, *A.B.L.*, p. 67 and pl. 19, 2.

19-3. *Black-Figured Shoulder Lekythos.* Pl. 46 a.

Inv. P 15442. H. 0.132 m. Diam. 0.075 m.

Handle and fragments of wall, shoulder and lip missing. The shape like that of **19-2**, save that the shoulder is slightly more sloping. The shoulder and body decoration the same as those of No. 2; a band of purple around the neck.

19-4. *Black-Figured Shoulder Lekythos.* Pl. 46 a.

Inv. P 15443. H. 0.132 m. Diam. 0.062 m.

Many small fragments missing including most of the shoulder; the surface badly burned and worn. On the shoulder three ivy leaves. On the body three figures right: a draped woman fleeing from a centaur who looks backward to throw a stone at a nude bearded man—Herakles?—who pursues him with a club. Traces of plentiful incision carefully done; none preserved of added color.

The poor preservation of the lekythos precludes closer identification; the tall slim shape suggests a date toward the close of the century.

19-5. *Black-Figured Shoulder Lekythos.* Pl. 46 a.

Inv. P 15441. Pres. H. 0.09 m. (to shoulder).

Fragmentary and badly burned; the neck, mouth, shoulder and much of the body missing. On the body there were three draped figures, one right and two left, which can be recognized from the incisions only, because all the glaze has peeled away.

19-6. *Banded Lydion.* Pl. 46 a.

Inv. P 15444. H. 0.101 m. Diam. 0.056 m.

Badly burned; the body and foot intact, the neck and rim shattered and lacking small chips. Disk foot and short stem below a tall turnip-shaped body; high neck flaring to a flat projecting rim. Heavy fabric, wheel-made of clay not noticeably micaceous, now burned grey. Black glaze on upper face of foot and stem, inside and outside the neck and for three bands at the shoulder. The upper face of the rim reserved.

19-7. *One-Handled Cup.* Pl. 46 a.

Inv. P 15445. H. 0.04 m. Diam. rim 0.063 m.

Mended from many pieces; small chips missing. Small deep cup with flat bottom and outward-tilted rim set off from the nearly shoulderless body by a groove outside; thick band handle rising slightly above the lip. Dull glaze, black to brownish over all, but now almost entirely peeled away. The clay burned grey.

A similar one-handled cup, somewhat earlier, was found in Grave 2. The type is subgeometric; cf. *Hesperia*, VII, 1938, pp. 413 f. and fig. 1, D7.

The lekythoi Nos. 2 and 3 would place our group near the end of the century though no doubt some of the other vases are a little earlier.

GRAVE 20

Cremation. Pl. 46 c.

Orientation: North-South.

Dimensions: length 1.70 m.; width 0.76 m.;

depth as preserved 0.16 m. The pit was cut into the firm red hardpan which had been baked hard around its edges. The deposit of ashes and charcoal filled the pit to its full depth as preserved; at one end remains of charred logs measuring 12 to 15 cm. in diameter and up to 0.89 m. in length, lay in position across the pit.

Skeleton: no traces save fragments of burned bone scattered through the ash and charcoal deposit.

Offerings: one black-figured lekythos at the southeast corner.

Date: near the end of the sixth century.

20-1. Black-Figured Shoulder Lekythos. Pl. 46 d.

Inv. P 15271. H. 0.132 m. Diam. 0.065 m.

Chips missing; somewhat burned and badly peeled. On the shoulder a cock left, an ivy leaf to either side. On the body a draped figure seated right on a folding stool as a nude figure walks away to right, turning his head to look back. A draped onlooker at either side. Coarse careless incision; added purple for ground line, fillets around heads, and touches on drapery.

Cock Class.

GRAVE 21

Inhumation. Fig. 15 and Pl. 46 f. (upper left).

Orientation: Northeast-Southwest; head to southwest.

Dimensions: could not be determined because of deep late disturbance. The whole upper part of the grave had been cut away by a later burial (Grave 24) which went deeper. Grave 21 in turn overlay an older burial, Grave 23, which had also been cut through by Graves 9 and 24.

Skeleton: the legs and part of the pelvis were found in place; parts of the skull were found, the largest fragment just over the pelvis. The legs were bent at the knees, the pelvis was flat on the ground; the body had evidently been buried with the knees bent and the legs drawn up. Female, about 35 years old.

Offerings: one disc of pottery, found in the earth under the skull fragment, and over the pelvis.

Date: uncertain, presumably seventh or sixth century.



Fig. 15. Graves 21 and 24.

21-1. Disc cut from wall of Pot. Pl. 46 e.

Inv. P 15368. Diam. 0.071 m.

Approximately round disc cut from the wall of a closed pot, the edges rough. Black to brownish glaze outside only, somewhat peeled. Probably a fragment from an amphora of the seventh or sixth century. Discs cut from pot walls may have been used as lids or stoppers.

BURIALS OF INDETERMINATE DATE (Nos. 22-48)

The remaining burials and cremations could not be dated because they contained no offerings. They are presented by type, first the burials, then the pyres. Some of these empty or robbed graves were no doubt older than the graves that could be dated by their offerings;

some may even have been Geometric or seventh century. In certain cases a relative chronology may be established from the relation of burials to each other; but there is no way of telling in which century they were made.

Inhumations

GRAVE 22

Inhumation.

Orientation: Northwest-Southeast; head to southeast.

Dimensions: could not be determined because late (Hellenistic) disturbance went to the level of the bottom of the grave. Its northwest end was missing, perhaps cut through for the pyre, Grave 19 above. We have already suggested that the Geometric pottery pp. 83-85 and Pl. 36, B-I, found in the upper filling of Grave 18, may have come from Grave 22.

Skeleton: only the skull, the shoulders, and most of the ribs, with the upper left arm, remained in place. The skeleton had evidently been outstretched on its back, the arms extended along the sides.

GRAVE 23

Inhumation. Pl. 40 d (left).

Orientation: Northeast-Southwest; head to southwest.

Dimensions: length as preserved 0.91 m.; width 0.79 m.

Grave 23 underlay Grave 21; about 10 cm. below the floor of the upper grave began to appear the bones of the skeleton of the lower, its floor 0.30 m. below. Both ends of the grave had been cut off by later burials: the head (southwest) by Grave 24, in which was found a superfluous skull, no doubt from Grave 23; and the foot (northeast) by Grave 9, a burial of about the middle of the sixth century. Thus the interrelation of these graves must be the

following: Grave 23 is older than the middle of the sixth century, since it was cut through at that date by Grave 9; it is also older than the overlying Grave 21. Grave 24, which cuts through both Graves 21 and 23, is later than either.

Skeleton: outstretched on back, arms extended along sides. Length as it lay, from knee to shoulder, 0.88 m. Male, 40 to 45 years old.

GRAVE 24

Inhumation. Fig. 15 and Pl. 46 f (middle).

Orientation: Northwest-Southeast; head to southeast.

Dimensions: length 1.84 m.; width 0.53 m.

Skeleton: outstretched on back, arms extended along sides, the left bent at the elbow, with the hand over the pelvis. Just above the head lay most of another skull, no doubt from Grave 23, the upper end of which was cut through when Grave 24 was made. Male, about 45 years old.

GRAVE 25

Inhumation. Fig. 16.

Orientation: Northwest-Southeast; head to southeast.

Dimensions: width 0.49 m.; the length could not be determined because of deep late disturbance.

Skeleton: outstretched on back, arms extended along sides. Length as it lay 1.40 m. Female, 20 to 30 years old.

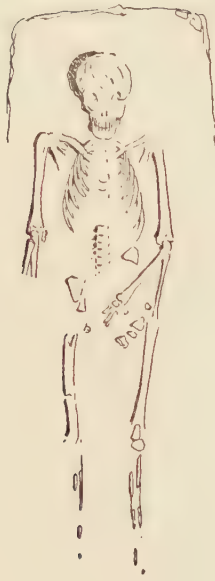


Fig. 16. Grave 25.



Fig. 17. Grave 26.

GRAVE 26

Inhumation. Fig. 17.

Orientation: Northeast-Southwest; head to northeast.

Dimensions: length 1.66 m. +; width could not be determined. The upper end of the grave had been cut off by a late pit.

Skeleton: outstretched on back, arms extended along sides; the skull cut off by the pit. Length of skeleton as it lay, shoulder to ankle, 1.42 m. Adult male.

GRAVE 27

Inhumation. Fig. 18 and Pl. 47 a.

Orientation: approximately East-West; head toward east.

Dimensions: length 1.75 m.; width 0.60 m.



Fig. 18. Grave 27.

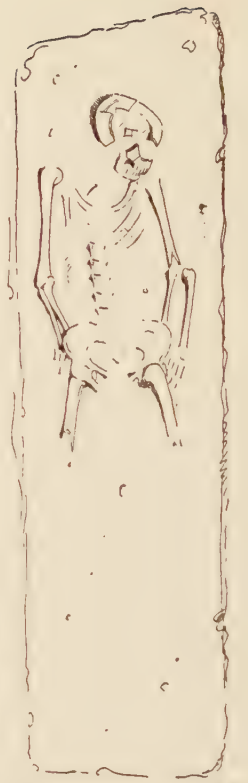


Fig. 19. Grave 29.

Skeleton: outstretched on back, arms extended along sides. Length as it lay 1.60 m. Female, about 24 years old.

GRAVE 28

Inhumation.

Orientation: Northeast-Southwest; head toward southwest.

Dimensions: length 1.44 m.; width 0.63 m.

Skeleton: outstretched on back, arms extended along sides. Length as it lay 1.32 m. The bones were in a very soft rotted condition. Male, 35 to 45 years old.

GRAVE 29

Inhumation. Fig. 19.

Orientation: Northwest-Southeast; head toward southeast.

Dimensions: length 1.90 m.; width 0.55 m.

Skeleton: outstretched on back, arms extended along sides. The legs below the knees were missing. Length as it lay, top of skull to knee, 1.06 m. Female, about 20 years old.

The grave lay at the bottom of one of Doerpfeld's old trenches, and the deposit to bedrock was modern refill.

GRAVE 30

Inhumation.

Orientation: North-South; head toward north.

Dimensions: width 0.72 m.; late disturbance had gone to the level of the floor of the grave and its length could not be determined.

Skeleton: outstretched on back, arms extended along sides. Length as it lay, 1.60 m. Female, 40 to 50 years old.

Cremations

Sixteen cremations were found, which could not be dated because they contained no pottery. Some had been disturbed in later times; others, as it would appear, had never contained any offerings. The pits were of varying dimensions, presumably in accordance with the size of the body to be burned, adult or child. In only two cases could a relative chronology be established; in all the others the pits were isolated and undisturbed by other cremations or by burials.

GRAVE 31

Cremation.

Orientation: Northeast-Southwest.

Dimensions: width 0.86 m.; the length could not be determined because one end had been cut away by a burial made later, Grave 28. The orientation was given by an air-channel 0.30 m. wide and 0.12 m. deep cut in the floor of the pit, certainly down the middle of the cutting on its longer axis. A heavy deposit of charcoal overlay the floor of the pit; scattered through it were small bits of burned bone. A few Geometric sherds, unburned, were found over this fill, and more in the area around the pit, above; these suggested that there had been a Geometric grave near by.

GRAVE 32

Cremation.

Orientation: Northwest-Southeast.

Dimensions: length 1.68 m.; width 0.55 m.; depth as preserved 0.22 m. The outlines of the pit were irregular: wider at the northwest than

at the southeast. It was filled with ash and charcoal throughout which were scattered small fragments of burned bone. Grave 32 was older than 33, which partly overlay it.

GRAVE 33

Cremation.

Orientation: approximately East-West.

Dimensions: length 0.73 m.; width 0.44 m.; depth as preserved 0.16 m. An irregular pit cut with a straight south and a curving north wall, and partly overlying Grave 32. The walls and floor hardened by burning; the ends of three charred logs lay side by side over the floor at the east end. A few loose sherds and some bits of burned bone; the upper part of the pit contained a filling of Hellenistic times.

GRAVE 34

Cremation.

Orientation: Northwest-Southeast.

Dimensions: length 1.50 m.; width 0.64 m.; depth as preserved 0.28 m. The pit was a regularly cut rectangle, showing traces of fire on its sides and bottom. At the surface was a carbonized log lying along the main axis of the pit; under it a series of short logs lay side by side across the width of the cutting. On cleaning out the charred wood and charcoal, fragments of burned bone were found; no pottery.

GRAVE 35

Cremation.

Orientation: since the pit was roughly cut

and oval in outline it could not be said to be oriented in any particular direction.

Dimensions: oval; greatest diameter 0.74 m. In the general filling over the pit there were many Geometric sherds and a skull, unburned, overlay the burned deposit in the pit; perhaps evidence that a Geometric grave had existed in the immediate vicinity. The pit was full of ashes and charcoal, and its sides hardened by fire. A few small bits of burned bone were scattered through the burned deposit.

GRAVE 36

Cremation.

Orientation: Northwest-Southeast.

Dimensions: length 1.72 m.; width 0.72 m. A rectangular pit, its sides and floor hardened by fire. The filling of the pit was a late refill, through which were scattered some of the cinders, charcoal and bits of burned bone of the original fill. At one place near the south side of the pit a bit of charred log 0.30 m. long overlay the floor.

GRAVE 37

Cremation.

Orientation: roughly square, without any particular orientation.

Dimensions: sides nearly equal; greatest length 0.67 m. Depth as preserved 0.23 m. In the fill just above the pit a skull, nearly complete, no doubt thrown out from a grave which had been disturbed. The filling of the pit itself was also a late refill, scattered through which was some of the charcoal of the pyre. Sides and floor of the pit baked hard by fire.

GRAVE 38

Cremation.

Orientation: roughly square, without particular orientation.

Dimensions: length 0.70 m.; width 0.67 m.; depth as preserved 0.15 m. The whole pit was full of ashes and charcoal; a fragment of a charred log measured 0.14 m. in diameter. Floor and sides of pit baked hard. A few

fragments of burned bone scattered through the ash and charcoal.

GRAVE 39

Cremation. Pl. 47 b.

Orientation: approximately North-South.

Dimensions: length 2.16 m.; width 0.95 m.; depth as preserved 0.20 m. In the bottom of the pit was a channel 0.24 m. wide and 0.10 m. deep, running down the center of the floor on the main axis of the cutting; it length was only 1.56 m., and it did not extend as far as either end. The filling of the pit was of earth mixed with charcoal, but there was no heavy burned deposit in the bottom; the grave had evidently been at some time disturbed and refilled.

GRAVE 40

Cremation.

Orientation: Northwest-Southeast.

Dimensions: length 2.03 m.; width 0.63 m.; depth as preserved 0.85 m. The sides and floor of the pit baked hard by the fire. At the bottom a deposit 0.15 m. thick of burned matter, through which were scattered small bits of burned bone. The upper filling of the cutting was late (Hellenistic) intrusion.

GRAVE 41

Cremation.

Orientation: Northeast-Southwest.

Dimensions: length 1.59 m.; width 0.69 m. The pit had been disturbed to bottom, but its walls bore traces of fire and a little of the charcoal deposit remained in the bottom.

GRAVE 42

Cremation.

Dimensions: roughly square, without orientation; sides 0.43 by 0.58 m. The floor of the pit baked hard. The cutting lay between a Hellenistic cistern and its drawshaft (cf. plan, Fig. 1), and the tunnel connecting the two passed directly underneath the pyre. A considerable deposit of charcoal containing bits of burned bone remained in the bottom of the cutting.

GRAVE 43

Cremation.

Orientation: North-South.

Dimensions: undetermined, because a foundation of the Roman house had been built into part of the pit, and only one corner remained, with part of the south and east walls. A shallow channel ran down the south wall of the cutting and along the middle of the floor on the longer axis of the grave, no doubt an air-channel. A little of the charcoal filling, containing a few bits of burned bone, remained in the corner.

GRAVE 44

Cremation.

Dimensions: roughly square, measuring 0.69 by 0.72 m.; no particular orientation. Like Graves 43 and 45 this had been disturbed by the building of the Roman house; a few bits of charcoal and burned bone remained in the corners.

GRAVE 45

Cremation.

Dimensions: roughly square, measuring 1.00 by 0.97 m.; no particular orientation. At the east the wall of the same Roman house which had intruded into Graves 43-44 had cut through one side of the pit, and its constructors had evidently disturbed the filling of the grave. In the refill of Roman times were still some of the cinders and bits of charcoal from the original filling.

GRAVE 46

Cremation.

Orientation: Northeast-Southwest.

Dimensions: length 1.98 m.; width 0.91 m. The pit lay farther up the slope toward the east than any of the other graves of the cemetery. It had been disturbed by a wall of the Roman house, and its filling was late Hellenistic throughout. The sides and floor of the shaft showed traces of burning, and near the east end a piece of a charred log seemed still to be in its original position.

Graves of Undetermined Type

GRAVE 47

Type of grave uncertain.

Orientation: Northeast-Southwest.

Dimensions: length 1.70 m.; width 0.55 m. The orientation of the cutting was at a right angle to Grave 29, and the level about 15 cm. higher. Nothing was found in this cutting in the way of pots or bones, although it seems certainly to have been a grave originally. The filling here was modern refill, as in Grave 29; the cutting lay at the bottom of one of Doerpfeld's trenches, and presumably contained no skeleton at the time he excavated it.

GRAVE 48

Type of grave uncertain.

Orientation: North-South.

Dimensions: length 2.60 m.; width 1.00 m.;

depth as preserved 0.40 m. The filling of the pit was late Hellenistic to bottom; there were no traces of a skeleton or of burning. The large dimensions of the pit suggest a cremation; but a grave lined with a stone wall as was Grave 4 could easily have been as big. No traces remained of any wall lining the sides of the pit. This cutting, quite the biggest one in the peribolos, is the only one large enough to accommodate the marble sarcophagus, which may possibly have stood in it. On the other hand one is reluctant to bury in the ground a sarcophagus made with separately added feet, and perhaps adorned with painting.

Two small cuttings side by side to the south of Grave 48 and to the east of Grave 8 may have contained burials. Their orientation is northeast to southwest; they measure 0.80 by 0.55 m., with a depth as preserved of 0.25 m.

Both contained late Hellenistic fill to bottom; they are not included among the numbered graves because their regularity with relation to each other and their orientation, probably taken

from the east wall of the area, suggest that they had some connection with later structures overlying the cemetery rather than with the period of its use for burials.

BURIALS OF THE ARCHAIC PERIOD OUTSIDE THE CEMETERY (Nos. 49-51)

Three additional graves of archaic times, already mentioned above, p. 68, follow; they were found in different parts of our area and had no connection with the enclosed cemetery in its southeast corner. Their importance as corroborative evidence for the continuation through the sixth century of the making of graves in the area later included within the walls of Themistokles has already been pointed out. Quite by chance each type of grave is represented among them: an inhumation, a cremation, and an urn-burial, though this last may be earlier than the sixth century.

GRAVE 49

Inhumation. Pl. 47 c.

Position: the grave lay in the bottom of the valley between the Great Drain at the west and its Roman successor just to the east, about 15 m. to the northwest of the northwest corner of the enclosed cemetery (cf. plan, Pl. 33). The area over bedrock was badly disturbed; two rectangular cuttings in the hardpan just to the south and southeast of Grave 49 may also have contained burials.

Orientation: East-West; head toward the west.

Dimensions: length 1.50 m.; width 0.71 m.; depth as preserved 0.25 m. The west end of the grave had been disturbed to bottom by a trench made for a later wall foundation.

Skeleton: outstretched on back, arms extended along sides. The skull and right shoulder were missing, and the legs from above the ankles. Length of skeleton as it lay, shoulder to mid-shin, 0.94 m.; evidently the skeleton of a half-grown child.

Offerings: one black-figured lekythos, beside the left knee.

Date: third quarter of the sixth century.

49-1. *Black-Figured Shoulder Lekythos*. Pl. 48 a.

Inv. P 18006. H. 0.134 m. Diam. 0.076 m. *Hesperia*, XVII, 1948, p. 166 and pl. XLVI, 1.

Mended from several pieces; small chips missing. On the shoulder, a cock, right; to either side a pendant lotus bud. On the body three nude runners, right. Purple: for line on the groove around the base of the neck, for a double band below the ground-line, on the wing and tail and for the comb and wattles of the cock, for the hair of all three runners, and on the chests of the two foremost. White for the neck and breast of the cock and for fillets across the chests of the two foremost runners.

Third quarter of the sixth century; cf. Haspels, *A.B.L.*, p. 36 for lotus bud and cock (or hen) decoration on the shoulder, and pp. 16-18, "fat runner" class.

GRAVE 50

Cremation. Pl. 47 d.

Position: the grave lay at the west side of the area, just to the south of the Street of the Marble Workers as it mounts the lower slope of the Hill of the Nymphs, climbing westward. Mentioned in *Hesperia*, XVII, 1948, p. 166. See plan, Pl. 33.

Orientation: North-South.

Dimensions: length 0.80 m.; width 0.65 and 0.55 m.; depth as preserved 0.20 m. The pit was not rectangular, the east end being about ten centimeters narrower than the west. It was

hollowed from the hardpan, which showed traces of the burning which had taken place on the spot. The burned deposit lay in the bottom of the cutting to a depth of about 0.15 m.; the whole had been covered with earth, which contained a few stray cinders. Bits of burned bone were scattered through the burning; some pieces of the femurs of a child were recognized.

Offerings; three black-figured lekythoi which lay shattered, but with all the pieces together, where the lekythoi had broken on being thrown into the pyre.

Date: beginning of the last quarter of the sixth century.

50-1. *Black-Figured Shoulder Lekythos.* Pl. 48 b.

Inv. P 17962. H. 0.15 m. Diam. of foot 0.041 m.

Badly burned and broken; chips missing and much of the surface flaked away. Traces of glaze bands around the lower part of the neck. On the shoulder a five-petalled palmette between pendant hooks at each side. On the body, five figures: at the left a draped and a nude figure, right; at the center a draped figure seated, right, on a folding stool; at the right a nude figure, right, facing a draped figure left. No traces of added color preserved.

50-2. *Black-Figured Shoulder Lekythos.* Pl. 48 b.

Inv. P 17963. H. 0.172 m. Diam. of foot 0.047 m.

Badly burned, and broken into many pieces; small chips missing. Somewhat larger than 50-1; a shallow groove at the junction of shoulder and neck, with traces of added purple. A three-petalled palmette with two o's at base on the shoulder; a draped onlooker at either side. On the body at the center a greaved warrior left, carrying spear and shield; two draped onlookers at either side. Incision rather carefully done; all traces of added color have disappeared, save for a little purple at the ground-line.

50-3. *Black-Figured Shoulder Lekythos.* Pl. 48 b.

Inv. P 17964. H. 0.17 m. Diam. of foot 0.047 m. Badly warped by burning at one side so that the pieces, which were all recovered, cannot be completely fitted together. The other side is less burned and the figured scene better preserved. Shape and decoration precisely similar to that of 50-2, except that the central palmette on the shoulder is five-petalled, two petals being added in red. Red also in the groove below the neck, on the folds of the drapery hanging in front of the onlookers, and on the warrior's greaves. Above the hem of the dress of the figure facing the warrior, a dot rosette, probably in white.

The two larger lekythoi, Nos. 2-3, belong to Miss Haspels' "hoplite leaving home" class, and probably date from around the beginning of the last quarter of the century; cf. *A.B.L.* pp. 66-67 and Appendix VII E.

GRAVE 51

Urn-burial of an infant. Pl. 48 c.

Position: the grave lay on the slope of the Areopagus in Roman house O, just east of the line where the hillside is scarped for the foundation of the west wall of the house; cf. plan, Pl. 33.

Cutting: the pit cut in bedrock into which the burial was set measured 0.95 m. from north to south and 0.55 m. from east to west. Its depth was 0.65 m. The burial urn, a pithos, was laid in the pit on its side, the mouth toward the south. A foundation wall of the Roman house passed close to the mouth of the pithos, for which we found no cover; one may have been removed when the foundation was laid. The side of the pithos which lay upward had been crushed in by pressure from above, but all the fragments were found inside where they had fallen, and there was no evidence that any hole had been made for the insertion of the body.

Skeleton: on the bottom of the pithos were found the skull and some of the leg-bones of

a small child who had seemingly been buried in a doubled-up position with the head toward the mouth of the pithos (south). No grave offerings were found.

Date: probably sixth or seventh century.

51-1. *Coarse Pithos*. Pl. 48 d.

Inv. P 19737. H. 0.51 m. Diam. rim 0.389 m.

Mended from many pieces; fragments from the rim and shoulder at one side and many

small chips missing. Ovoid body with a low flat base; wide neck and flaring rim, flat on top and grooved at its outer edge. Coarse gritty pinkish-buff clay, unglazed. The surface somewhat flaked. Not wheel-made. The pithos is difficult to date; examples of the same general shape are known from Geometric times onward. The flaring projection of the lip, and the groove on its outer face, however, suggest a date later than the Geometric period.

PYRE BURIALS

Throughout the area of the American excavations, though never within the limits of the Market Place proper, was found a number of small pyres which we have somewhat reluctantly concluded to be the remains of infant cremations. Altogether, seventeen of these have been found *in situ*; in addition, at various places characteristic groups of pottery have turned up, usually together with cinders and charcoal, and with traces of burning on the pots themselves. These must be interpreted as the remains of similar pyres which had become scattered or otherwise disturbed in later times. Of the latter class ten groups have been found; the total number, twenty seven, would seem to indicate that the practice was fairly common in the second half of the fourth and the first half of the third centuries. The fifth-century group in House D, Room 2, found in a pit full of cinders and showing traces that the fire had been burned on the spot, suggests that the practice may have gone back to the latter half of the fifth century.¹⁹ Fifteen of the seventeen pyres found *in situ* lay within the area to the west of the Areopagus; the other two were on the Kolonos Agoraios, one to the north, the other to the south of the Hephaisteion. No actual pyres were found *in situ* elsewhere in the excavations, but the groups of pots from pyres which had been disturbed and scattered in late times were found as far to the east as the Panathenaic Way on the lower slopes of the Acropolis, indicating that the whole district occupied by workshops and dwellings outside the official Agora had been the scene of infant cremations.

A typical pyre of this sort was made in a small shallow pit dug for the purpose. The pits were of varying shape, from nearly square to oblong, or from round to oval, usually measuring 0.60 to 0.80 m. across, and from 0.15 to 0.25 m. deep. The semi-baked condition of the floors and sides, hardened and reddened by fire, showed that the pyres had actually been burned in the pits. Usually a heavy deposit of cinders and wood-carbon overlay the floors; sometimes pieces of thick sticks or small logs

¹⁹ These groups have been mentioned, and one of them illustrated, in *Hesperia*, XVII, 1948, pp. 166-167 and pl. 46,3; and XVIII, 1949, pp. 215-216.

could be discerned and measured. Scattered throughout the deposit of burned matter were small bits of calcined bone, usually too small to be identifiable. Some of these bits were undoubtedly fragments of animal bones, while others could have been either animal or human. The small pots or other grave offerings usually overlay the burned deposit, as though they had been thrown into the pyre after the fire had died down to embers. Usually many of the pots were complete, though burned and broken into fragments; the burning on the pots themselves showed that they had been thrown on the pyre before the fire was entirely out. Often the small pots were fragmentary and incomplete; no doubt the pyres spread beyond the limits of the pits made for them, and the fragments which fell outside the pits were swept up and thrown out and so became lost. Around several of the pyres there was a thin scattering of cinders, and occasionally a fragment of one of the pots, for a considerable distance away from the pits on the level through which the pits had been cut—the ground level of the time. In some cases there was evidence that a new floor had been laid to cover the pyres and to resurface the area after the cremation had taken place. Three of the pyres, with all the small offerings still in place as they were found, are illustrated on Plate 49.

The small pyres of the fourth and third century differ very little from such archaic pyres as Grave 50 (p. 108 above). The dimensions of the pits, the semi-baked condition of the earth under and beside them, the heavy deposit of burned matter at the bottom, overlaid by the pots thrown on after the fire had died to embers, are the same in the early and the later pyres. The absence of identifiable human bones was as characteristic of the pyres of archaic times in the cemetery as it is of the later pyres. There can be little doubt that the pyres of both periods were made for the same purpose; the invariably small size of the later pyres suggests that in the fourth and third centuries the bodies of infants only were cremated on pyres within the city. No doubt the small soft bones were almost completely consumed by the fire leaving little tangible proof that the cremation of the bodies of infants was practised. In general at Athens we expect to find children buried in large coarse pots; but at Olynthus in the fourth century it seems to have been the practice to burn the bodies.²⁰

The character of the offerings found in the pyres was made definitely funerary in six cases by the inclusion of dummy alabastra made of poros. Alabastra were commonly used or offered at graves, perhaps originally because they contained oil or other unguent needed at the funeral ceremonies. Our dummy alabastra, solid except for a slight hollowing at the mouth, must have had entirely symbolical significance. Such alabastra have frequently been found in Athenian graves and pyres;²¹

²⁰ *Olynthus* XI, pp. 145 f.; children were cremated, infants apparently buried. The smallest of the pyres of the fourth century at Olynthus, Grave 260 (*ibid.* p. 55) measured 0.60 x 0.90 m., quite comparable in size to our pyres.

²¹ Mrs. Semni Karouzou informs me that several were found in the unpublished graves exca-

since they can have had no practical use they must have been made specifically to be offered at the grave. Specifically grave furniture, too, seem to have been the shallow, often roughly made plates with two ribbon handles at the rim, usually decorated with glaze bands on the floor, sometimes with designs added in white paint. Such plates are found in all but three of our pyres and in most of the groups from similar pyres scattered in late times. Moreover, they are never found in such groups of ordinary household pottery as are found in pits or wells or similar deposits. In the entire collection of pottery at the Agora fragments of only three banded plates have been found which were not associated with other pottery such as is found in pyres; and these then were strays, casual finds in late deposits.²² The inference is that these banded plates were made exclusively for funerary use. They had, indeed, somewhat more elaborately decorated ancestors in the sixth century; there are three unpublished examples at the Kerameikos, and a drawing of another was published by Brückner and Pernice in 1893;²³ all were from the Dipylon Cemetery.

Other types of pots commonly found in the pyre groups at the Agora but conspicuously lacking in the deposits of ordinary household wares of the fourth and third centuries are small lidded pyxides covered with black glaze, often rather roughly made, and miniature cooking pots and casseroles (*chytrai* and *lopades*). These small vases are so frequently found in the pyre groups that they would seem to have been indispensable; and their absence from other deposits suggests that like the banded plates they were specially made for funerary use. Their miniature size, indeed, made them appropriate offerings in the graves or pyres of children and at the same time rendered them useless for any everyday purpose. The unglazed miniature cooking pots are faithful miniatures of ordinary household ware; sometimes they are made of the normal coarse micaceous fabric, red to brown, of real cooking pots, sometimes in the usual buff or pinkish clay used for the ordinary Attic pottery. The small cooking pots have been found elsewhere in graves of the fourth century²⁴ and seem to have been commonly offered in graves of the period.

The dummy alabastra of poros, the banded plates, the small lidded pyxides, and the miniature cooking pots seem, then, to have been specially made for use at the grave or pyre. Other types of pot seem to have been as indispensable for funerary use, though they are ordinarily found in groups of household pottery and therefore do

vated on the site of the Royal Stables, now occupied by the Metochikon Tameion building at the corner of Stadium and Bucharest Streets. A large number of similar poros alabastra was likewise found in pyres in the neighborhood of the grave of Hegeso at the Kerameikos, together with burned human bones and pottery identical in type to the pottery from our pyres.

²² Similarly, one dummy alabastron of poros was found in a late deposit; presumably it came from a pyre which had been disturbed, since one side of it showed evidence of severe burning.

²³ *Ath. Mitt.*, XVIII, 1893, pp. 89-90 and figs. 2-3.

²⁴ Chatby; Breccia, *La Necropoli di Sciatbi*, Cairo, 1912, p. 89, no. 271 and figs. 48-49. Examples of both normal and miniature pots were found.

not seem necessarily to have been made solely for use at the grave. Very common in our pyre-groups are the ordinary saucers with plain or furrowed rim common throughout the fourth and third centuries; and apparently not to be omitted from any funeral were the roughly made miniature saucers, usually glazed, sometimes left unglazed, which are found in numbers in every group. These little saucers may have been considered appropriate offerings in the graves of children because of their small size; in any case no pyre group seems to be complete without five or six of them.

The groups of vases used or offered at the pyre were usually filled out with two or three larger pots, cups, skyphoi, or kantharoi, and occasionally a lamp. It would be very difficult to date the pyre-groups without the evidence of the lamps and pots of normal size for everyday use; the funerary vases have little to show, either by their shape or their fabric, when they were made. The ordinary pots offered in the graves, however, may not necessarily offer very close datings for the pyres, since they may well have seen use over a considerable time in the house before being used at the grave. In general, the period during which infant-cremation was practised in Athens as suggested by the pottery from the pyres is from the middle of the fourth to the middle of the third centuries before Christ. The pyre of the second half of the fifth century (if such it was) found in House D, to be described in the following article (below, Pl. 73), may indicate that infant-cremation was practised earlier; no pyres later than the middle of the third century have yet been found in the American excavations.

Only the pyres found *in situ* within the area between Areopagus, Piraeus, and Melite Streets are published here. These in any case include most of the pyres uncovered, and suffice to establish the fact that infant cremation was practised at Athens. For present purposes their further significance is twofold; first, they lay within the area enclosed by the city wall, and second, in a number of cases they establish the dates by which various houses and buildings had been abandoned, since it would seem beyond the realm of possibility that such pyres could have been burned within the houses while they were still standing roofed. Thus the poros building would seem to have been abandoned or unroofed by the middle of the fourth century or shortly thereafter; House B by some time in the third quarter of the century; House D by about the same time; House C, except Room 12, by the end of the century. The reason for the abandonment of these houses is not apparent, unless it may be that prosperous owners were dispossessed or disenfranchised during the political upheavals of the latter part of the fourth century. The dates for abandonment suggested by the pottery from the pyres, however, seem a little too early for such an explanation; and in any case we should expect scattered houses, and not entire areas, to have been affected. The depopulation and semi-abandonment of this part of Athens—the waterless slopes of the Pnyx—in the latter part of the fourth century is mentioned in

literature, however,²⁵ and perhaps reflected not only in our area but in the abandonment of an elaborate building program on the Pnyx itself, probably started in the third quarter of the fourth century by Lycurgus and never carried to completion.²⁶

Fourteen pyres are published here, and one more, earlier than the rest, will be described in a subsequent paper. The pyres are arranged by the houses in which they lay, and as far as possible chronologically. Two entire groups are illustrated; for the rest, it has not seemed worthwhile to illustrate the numerous miniature saucers and pots of cooking ware, all nearly exactly alike, and in each case a selection is given only of the larger pots which are of significance for dating.

PYRE 1

1. Poros Building, Northwest Room.

Pit: dimensions 0.65 x 0.35 m., depth 0.17 to 0.20 m. The pit lay close beside the east wall of the room.

Level: the pyre seems to have been contemporary with the marble-chip layers of the stone cutters who evidently took over the area after the abandonment of the building. Presumably the room was not roofed at the time the pyre was burned.

Deposit: carbon and ashes, with small bits of burned bone scattered throughout, the small burned pots on top.

Dating: the cup-kantharos finds parallels in Agora groups of the mid-fourth century and just before; the pyxis, somewhat lower and plumper than later ones, has a heavy ring foot instead of a solid base. The pyre must have been burned at about the middle of the century, or just after.

Offerings:

1, 1. *Black-Glazed Cup-Kantharos*. Pl. 50 a.

Inv. P 20059. H. 0.064 m. Diam. 0.10 m.

Few chips missing. Moulded ring foot and hemispherical body slightly in-turned at the plain lip; high-swung handles bent inward at the top. Good black glaze over all.

1, 2. *Small Lidded Pyxis*. Pl. 50 a.

Inv. P 20060. H. overall 0.076 m. Diam. 0.072 m.

High heavy ring foot and wide shallow body; the rim flanged at its inner edge to hold the lid. Convex lid with moulded knob handle. Thin glaze over all except the foot of the pyxis.

1, 3 and 4. *Saucers with Plain and Furrowed Rims*. Pl. 50 a.

Inv. P 20061-62. H. 0.022 and 0.03 m. Diam. of both 0.13 m.

Ring foot and flat floor with narrow rim sloping slightly outward; No. 3 furrowed by two grooves, No. 4 plain. Thin dull glaze, red-brown to black, over all. No. 4 roughly made and irregular, considerably higher at one side than the other.

1, 5 and 6. *Banded Plates*. Pl. 50 a.

Inv. P 20063-64. H. 0.03 and 0.027 m. Diam. 0.14 and 0.135 m.

Both somewhat roughly made, with low flat base, shallow body, plain rim, and ribbon handles at the rim. Glaze bands on the floor, glaze on the handles.

²⁵ Cf. Judeich, *Topographie*² p. 86 and note 1.

²⁶ Cf. *Hesperia* XII, 1943, pp. 293 f. and pp. 300-301.

1, 7. *Miniature Cooking Pot*. Pl. 50 a.

Inv. P 20065. H. 0.07 m. Diam. 0.09 m.

Plump round-bottomed pot with one handle from rim. Wide round mouth, plain rim slightly out-turned. Gritty reddish-buff clay.

1, 8. *Miniature Casserole with Lid*. Pl. 50 a.

Inv. P 20066. H. overall 0.045 m. Diam. 0.10 m.

Shallow round-bottomed casserole with single vertical handle; flange inside to receive the lid. Plain convex lid with rough knob handle.

1, 9-14. *Miniature Saucers, Glazed*. Pl. 50 a.

Inv. P 20067-072. H. 0.017 to 0.02 m. Diam. 0.063 m. to 0.068 m.

Small flat-bottomed saucers, the bottoms left rough from the wheel, covered over all with thin dull black glaze.

PYRE 2**2. House B. Pl. 49 a.**

Pit: dimensions about 0.85 by 0.60 m. A packing of small stones which lay thirty centimeters above the pyre may have served as a cover. The bottom of the pit was reddened and hardened by the fire which had been burned in it.

Level: all the floors of House B had been destroyed in later times and there was no house level preserved to which the pyre could be related.

Deposit: the pots entirely overlay a thick deposit of wood-carbon and ashes, so that it seemed certain that they had been thrown on top of the embers after the pyre had burned down. Parts of several sizeable sticks of wood could be distinguished, but it was not possible to measure their diameters. Small fragments of bone, not identifiable, were scattered throughout the burned deposit.

Dating: The vases are comparable to the latest from Olynthus, and seem slightly less developed than any from the Chatby cemetery. They were probably made around the middle of the fourth century, and the pyre burned at some time in the third quarter.

Offerings:

2, 1. *Dummy Alabastron of Poros*. Pl. 50 b.

Inv. ST 339. H. 0.23 m. Diam. lip 0.068 m.

Broken in small pieces, but complete save for chips; burned. A shallow hole at the mouth and

a depression in the bottom suggest that the alabastron was made by turning. A raised ring around the body below the shoulder.

2, 2. *Lamp, Type VII B*. Pl. 50 b.

Inv. L 4021. H. 0.065 m. L. 0.11 m.

Intact. Low base, moulded underneath, and heavy ball-shaped body with a pierced lug at one side; no handle. Two grooves around the rim. Glaze inside, and four bands on and around the rim. A similar lamp from Group B at the Agora: *Hesperia* III, 1934, p. 341 and fig. 21, B 30.

2, 3. *Black-Glazed Cup-Kantharos*. Pl. 50 b.

Inv. P 16600. H. 0.065 m. Diam. 0.10 m.

Burned; small fragments missing. Moulded ring foot, short stem. Straight rim curved out at the lip. Four palmettes stamped on floor within a double ring of rouletting. Good black glaze; reserved line at junction of body and stem. A similar kantharos, *Hesperia*, Supplement IV, p. 133 (a), fig. 98, is dated before the middle of the fourth century; another from Chatby, no. 178, is somewhat later, Breccia, *La Necropoli di Sciatbi*, pl. LIII, 102.

2, 4. *Black-Glazed Cup-Kantharos*. Pl. 50 b.

Inv. P 16601. H. 0.079 m. Diam. 0.095 m.

Small fragments missing. Moulded ring foot, low slightly flaring wall, swollen rim. Rouletting around edge of floor. Good black glaze;

reserved and reddened line around foot. Somewhat earlier than Chatby no. 177, Breccia, *op. cit.*, pl. LIII, 104.

2, 5. Black-Glazed Skyphos. Pl. 50 b.

Inv. P 16602. H. 0.088 m. Diam. 0.069 m.

Small fragments missing. Widely flaring ring foot and narrow pointed body drawn in to the rim; handles spreading from their attachments. Good black glaze; a reserved zone above the foot filled with cross hatching. Slightly more developed than the skyphos, *Hesperia*, Supplement IV, p. 133 (b), fig. 98.

2, 6. Small Lidded Pyxis. Pl. 50 b.

Inv. P 16603. H. overall, rest. 0.065 m. Diam. 0.062 m.

The pyxis fragmentary; the base and most of the rim missing and restored. Lid with moulded knob handle.

2, 7. Black-Glazed Salt Cellar. Pl. 50 b.

Inv. P 16604. H. 0.031 m. Diam. 0.067 m.

Heavy base ring and thick wall; good black glaze, burned. A similar salt cellar Chatby no. 204, Breccia, *op. cit.*, pl. LVI, 117.

2, 8. Saucer with Furrowed Rim. Pl. 50 b.

Inv. P 16605. H. 0.015 m. Diam. 0.112 m.

Roughly made saucer with flat bottom; two grooves on rim. Dull red glaze over all, except top of rim and resting surface.

2, 9-10. Banded Plates. Pl. 50 b.

Inv. P 16606-607. H. 0.024 and 0.022 m. Diam. 0.128 and 0.13 m.

Burned; fragments missing. Low plates left rough underneath; No. 9 flat bottomed, No. 10 with a low base. Ribbon handles attached to the rims. Glaze bands on floor, glaze on handles.

2, 11. Miniature Cooking Pot. Not Illustrated.

Inv. P 16615. H. 0.064 m. Diam. 0.099 m.

Squat round-bodied pot, convex at the bottom, with rolled lip and round mouth; one handle. Micaceous cooking-ware fabric, covered outside with a wash of thin black glaze. Similar to 1, 7, pl. 50 a.

2, 12-18. Miniature Saucers, Glazed. Not Illustrated.

Inv. P 16608-614. H. 0.011 to 0.014 m. Diam. 0.048 to 0.064 m.

Small carelessly made saucers, thin bottoms left rough, of greyish-brown clay covered with a thin wash of dull black to red glaze.

PYRE 3

3. House D, Room 5.

Pit: the shallow pit lay about a meter to the east of the door between Rooms 2 and 5; it was round, with a preserved diameter of only 0.45 m. Probably its whole extent was not preserved, but the reddening and hardening of the earth under its floor showed that the fire had been burned on the spot.

Level: the layer into which the pit had been dug ran over the foundation of the wall between Rooms 2 and 5, showing that the pyre was made after the house had been abandoned.

Deposit: the layer of cinders and broken pottery was separated from the floor of the pit by a layer of clean earth 3-5 cm. thick. This observation suggested that the pit had been swept out, perhaps in order to gather fragments of bone, after the fire had died out, and that the remnants had afterward been thrown back before the area was covered with a new flooring of clay. The presence of lids without pots suggests that not all the contents of the pyre were thrown back into the pit.

Dating: the skyphos is somewhat earlier than

those from Pyre 4 in Room 4, and the lamp is definitely earlier. The pottery should be of the third quarter of the fourth century, or just after the middle; the pyre was probably burned near the end of the quarter.

Offerings:

3, 1. *Lamp, Type VII.* Pl. 50 c.

Inv. L 4440. H. 0.035 m. L. 0.091 m.

Tip of nozzle and horizontal strap handle at the back missing. Low round-bodied lamp with small thick raised base. Rounded inward-sloping rim, three shallow grooves outside it. Excellent black glaze inside and out.

3, 2. *Black-Glazed Skyphos.* Pl. 50 c.

Inv. P 19296. H. 0.074 m. Diam. rim 0.083 m.

Fragmentary; the foot and parts of wall and rim missing and restored. Corinthian type; reserved zone above foot decorated with cross hatched lines. Good black glaze. A comparable skyphos from the Agora, slightly earlier: *Hesperia*, Supplement IV, p. 133 (b), fig. 98.

3, 3. *Black-Glazed Cup-Skyphos.* Pl. 50 c.

Inv. P 19298. H. 0.028 m. Diam. 0.064 m.

Much of the body and most of one handle missing and restored. Bolsal type; ring foot, flaring, and plain rim; handles drawn in at

attachments. Compare *Hesperia*, Supplement IV, p. 133 (e), fig. 98.

3, 4. *Black-Glazed One-Handler.* Pl. 50 c.

Inv. P 19297. H. 0.023 m. Diam. 0.066 m.

Low raised base and plain rim. Poor dull black glaze, much peeled.

3, 5. *Lid of Small Pyxis.* Pl. 50 c.

Inv. P 19299. H. 0.046 m. Diam. 0.067 m.

Plain slightly convex lid with down-turned rim and stemmed knob handle, the knob moulded in three degrees. Black to reddish brown glaze over all.

3, 6-7. *Coarse Lids of Miniature Casseroles.* Not Illustrated.

Inv. P 19300-301. H. 0.024-0.026 m. Diam. 0.086-0.09 m.

Convex lids with plain edges and small knob handles. Cooking ware fabric, unglazed; similar to 1, 8, Pl. 50 a.

3, 8-14. *Miniature Saucers, Black-Glazed.* Not Illustrated.

Inv. P 19302-308. H. 0.014 to 0.023 m. Diam. 0.067 to 0.076 m.

Small roughly made saucers with low base (except No. 11, with flat bottom). Thin wash of dull glaze over all except bottoms.

PYRE 4

4. House D, Room 4.

Pit: oval; diameter, E-W. 0.80 m., N-S. 0.65 m., but the northernmost edge had been cut away in late times. Depth 0.12 m. Floor and edges reddened and hardened by fire.

Level: the pit was made in a layer of earth which had accumulated after the abandonment of House D; though its level was about the same as that of the terrazzo floor in the court, this layer covered the foundation of the wall between Rooms 3 and 4.

Deposit: here the small pots had quite clearly been thrown on the fire after it had died down, since they overlay a fairly heavy deposit of ash and carbonized wood and in many cases were not themselves much burned. Among the ash and cinders unidentifiable fragments of burned bone.

Dating: comparison with pottery from Olynthus shows our pots to be later than 348 B.C., and parallels can be found in the Chatby cemetery. Most of the datable pots would seem to belong late in the third quarter of the fourth

century; the pyre was probably burned near the beginning of the last quarter.

Offerings:

4, 1. *Dummy Alabastron of Poros*. Pl. 51 a.

Inv. ST 423. H. 0.223 m. Diam. rim 0.068 m.

Traces of burning; few chips missing from lip. Solid dummy alabastron made by turning; depression in the bottom, and shallow hole at the mouth. Two grooves around the shoulder.

4, 2. *Lamp, Type VII B*. Pl. 51 a.

Inv. L 4400. H. 0.052 m. L. 0.10 m.

Small chips missing; burned. Low base and ball-shaped body; pierced lug at left side, no handle. Groove outside the rim; glaze on rim, to each side of groove, on lug, and inside. Glaze dots across base of nozzle, and around wick-hole.

4, 3-4. *Black-Glazed Skyphoi*. Pl. 51 a.

Inv. P 19048-049. H. 0.102 and 0.101 m. Diam. rim 0.076 and 0.077 m.

Both mended from many pieces, and burned. Thin-walled Corinthian type, sharply drawn in at the rim and above the flaring foot, the handles spreading widely from the attachments and squared at the ends, No. 3 decorated with cross-hatching in a reserved band above the foot, and with glaze rings underneath; No. 4 entirely covered with thick black glaze. These skyphoi are somewhat later than any from Olynthus: cf. *Olynthus* V, pl. 184, 968; also later than one from the Agora dated in the second quarter of the fourth century: *Hesperia*, Supplement IV, p. 133 (b), fig. 98. They also look later than a skyphos from Chatby no. 158, Breccia, *op. cit.*, pl. LII, 100. They should probably be dated at the end of the third or beginning of the fourth quarter of the century.

4, 5. *Black-Glazed One-Handler*. Pl. 51 a.

Inv. P 19050. H. 0.039 m. Diam. 0.106 m.

The handle and part of the rim and wall

missing. Ring foot, lightly grooved on resting surface. Walls vertical, floor nearly flat. Rim rounded on top and slightly out-turned. Glazed over all except for resting surface and reserved line around top of foot. Traces of stacking on floor.

4, 6. *Black-Glazed Guttus*. Pl. 51 a.

Inv. P 19047. H. 0.082 m. Diam. foot 0.058 m.

Small bits missing. Ring foot and broad body with a slight angle at level of greatest diameter. Flat shoulder set off by a substantial moulded ridge. Narrow neck, broad gently rounded lip. Grooved ring handle attached below shoulder ridge. Mottled glaze, black to grey and red, much peeled and somewhat burned. Similar gutti (wrongly called lagynoi) were found at Olynthus: cf. *Olynthus* V, pl. 172, nos. 814, 821-823, and 830. Another from the Chatby cemetery, no. 147, Breccia, *op. cit.*, pl. L, 89. Agora groups suggest for this guttus a date in the third quarter of the fourth century; a similar one was found in Hellenistic Group B, but not published with the other pottery of the group.

4, 7. *Small Lidded Pyxis*. Pl. 51 a.

Inv. P 19046. H. overall 0.07 m. Diam. rim 0.059 m.

High solid base and flange at inner edge of projecting rim to hold the lid. Dull glaze over all, black to brownish, and somewhat peeled.

4, 8-9. *Banded Plates*. Pl. 51 a.

Inv. P 19051-052. H. 0.027 and 0.024 m. Diam. 0.129 and 0.134 m.

Both burned and missing fragments. Roughly wheel-made; ribbon handles at the rims. Glaze bands on rim and floor, glaze on handles.

4, 10-11. *Lidded Bowls*. Pl. 51 a.

Inv. P 19053-054. H. overall 0.057 and 0.055 m. Diam. rim 0.128 and 0.125 m.

Shallow bowls with gently rounded bottom

and slightly flaring wall; the rim out-turned and grooved on the inside to take the lid. Low domed lids with button handles. Very thin fabric, neatly made of pinkish-buff clay, and glazed on the inside only. A similar bowl from House C, Pyre 6 below.

4, 12-13. *Miniature Casseroles with lid*. Not Illustrated.

Inv. P 19055-056. H. overall 0.042 and 0.039 m. Diam. rim 0.097 and 0.095 m.

Pinkish-buff clay, unglazed. Both fragmentary, and burned. Similar to 1, 8.

4, 14-15. *Miniature Cooking Pots*. Not Illustrated.

Inv. P 19057-058. H. 0.068 and 0.062 m. Diam. 0.098 and 0.099 m.

Both fragmentary, and burned. Pinkish-buff clay. Similar to 1, 7.

4, 16-19. *Glazed Saucers*. Not Illustrated.

Inv. P 19059-062. H. 0.013-0.016 m. Diam. 0.103-0.106 m.

All broken and burned. Shallow saucers on broad flat bottoms left rough from the wheel. Rims thickened and slightly up-turned. Streaky dilute glaze on the floor.

4, 20-28. *Miniature Saucers*. Not Illustrated.

Inv. P 19063-071. H. 0.011-0.013 m. Diam. 0.051-0.06 m.

Small roughly made saucers, the bottoms left rough from the wheel. Brownish-buff clay, unglazed except No. 28, covered with a thin dull red glaze wash.

PYRE 5

5. House D, Room 2.

Pit: the pyre lay less than a meter to the south of the fifth century pyre mentioned on p. 113, in Room 2, which was the court of the house. The area of the pit itself was not well defined, though traces of the fire were apparent on the ground. Part of the burned deposit ran under the stone bedding for the terrazzo floor of the third period of the house, preserved at the north, indicating that the pyre had been burned before the floor was laid. Since, however, it was one of the few pyres found in the courtyard of a house, it could have been burned while the house was still in use, in its second period.

Deposit: the fragments of pots overlay a heavy layer of wood coals and ash; small bits of charred bone were found throughout. There was some evidence of disturbance, probably when the new floor of the court was laid.

Dating: the fragmentary lamp, though unglazed, is not a late example of Type VII and probably belongs just before the middle of the fourth century. The cup-skyphos is earlier than

anything else in the group, and may have been in use for some time before use at the pyre. The pyxis is of the earlier type, with ring foot rather than solid base. The pyre must have been burned near the middle of the fourth century or perhaps a little earlier.

Offerings:

5, 1. *Lamp, Type VII B*. Pl. 51 b.

Inv. L 4475. H. 0.04 m. Pres. L. 0.078 m.

Fragmentary; the profile nearly complete, with nozzle and an attachment of a strap handle at the back. Very low raised base, lightly grooved underneath. Small narrow nozzle; three fine grooves on the wall outside the rim. Black glaze inside only.

5, 2. *Black-Glazed Cup-Skyphos*. Pl. 51 b.

Inv. P 19328. H. 0.045 m. Diam. 0.09 m.

Many fragments missing and restored. Bol-sal type with flaring ring foot, the wall above slightly concave. Slender handles drawn in at the rim. Cluster of four palmettes stamped at centre of floor. Good black glaze; inside foot

reserved and decorated with glaze rings. Comparable to 3, 3, Pl. 50 c.

5, 3. *Small Lidded Pyxis*. Pl. 51 b.

Inv. P 19331. H. overall 0.059 m. Diam. 0.052 m.

Fragments missing, including the knob of the lid. Low ring foot and rim flanged at inner edge to hold the lid. Good black glaze.

5, 4. *Unglazed Saucer*. Pl. 51 b.

Inv. P 19332. H. 0.016 m. Diam. 0.15 m.

Restored from three non-joining fragments. Ring foot, flat floor, convex rim raised at the edge. Carefully made of fine buff clay, and unglazed.

5, 5-7. *Saucers with Furrowed Rim*. Pl. 51 b.

Inv. P 19325-327. H. 0.02 to 0.024 m. Diam. 0.15-0.156 m.

Fragments missing from all three. Low ring foot, flat floor, upward-curved rim, grooved on its upper face: on No. 5 the rim nearly flat, with a single groove; on No. 6 three grooves on inward-standing rim; on No. 7 nearly flat rim with double groove. All three glazed over all, except grooved faces of rim.

5, 8-10. *Banded Plates*. Pl. 51 b.

Inv. P 19322-324.

8-9. H. 0.015 and 0.019 m. Diam. 0.148 and

0.146 m. Low base and very shallow flat floor, No. 8 with a depression at the center; plain rim, ribbon handles. Glaze bands on the floor, glaze on the handles.

10. Three fragments of a similar banded plate decorated with white painted ornaments. Part of the central band preserved; at the edge part of the rim and a handle attachment. Bird-like object in white near the rim.

5, 11. *Miniature Cooking Pot*. Not Illustrated.

Inv. P 19334. H. 0.058 m. Diam. mouth 0.048 m.

Much missing; cooking ware fabric. Similar to 1, 7, Pl. 50 a.

5, 12. *Miniature Casserole with Lid*. Not Illustrated.

Inv. P 19333. H. overall 0.06 m. Diam. 0.104 m.

Fragments missing. Cooking-ware fabric, with streaks of thin glaze wash outside. Similar to 1, 8, Pl. 50 a.

5, 13-22. *Miniature Saucers, Glazed*. Not Illustrated.

Inv. P 19335-344. H. 0.015 to 0.02 m. Diam. 0.067 to 0.073 m.

Roughly made saucers with flat bottom and shallow body; plain rim. Thin dull glaze over all, black to brownish and red.

PYRE 6

6. House C, Room 8.

Pit: oval, measuring 0.75 x 0.65 m. The floor of the pit baked hard and reddened by fire.

Level: the pit had been cut in a layer of earth which had accumulated after the abandonment of House C and which overlay the floor of its latest period; the floor level corresponded to that of a change of construction in the east wall of the house. A thin layer of earth had been laid over the area of the pyre.

Deposit: small pots overlying a layer of ashes and cinders at the bottom of the pit. Charred bits of sticks measuring 0.06 and 0.10 m. in diameter could be isolated. Small bits of charred bone were mixed throughout the deposit; some of them may have been human.

Dating: the pyre was made at approximately the same level as Pyres 7 and 8 in Rooms 4 and 6. The pots find parallels in Agora Group A; they seem later than anything found at Olyn-

thus, somewhat earlier than most of the pottery from the Chatby cemetery. The pyre was probably burned near the end of the fourth century.

Offerings:

- 6, 1. *Dummy Alabastron of Poros*. Not Illustrated.

Inv. ST 385. Pres. H. 0.184 m.

The neck and mouth missing; badly burned. A hollow at the bottom suggests that the alabastron was made by turning.

- 6, 2. *Lamp, Type VII B*. Pl. 51 c.

Inv. L 4176. H. 0.037 m. L. 0.084 m.

Burned; the horizontal strap handle at the back missing. Low base, ball-shaped body, grooved rim, no lug. Unglazed. Except for the handle at the back comparable to *Hesperia* III, 1934, p. 322 and fig. 7, A 43.

- 6, 3-4. *Black-Glazed Skyphoi*. Pl. 51 c.

Inv. P 17705-706. H. 0.079 and 0.087 m. Diam. rim 0.084 and 0.082 m.

Small fragments missing from both; burned. Projecting ring foot and round body tapering below. A groove above the foot. Black to red glaze over all, except the bottom, decorated with ring and dot. No. 4 smaller than 3, and somewhat crooked. These skyphoi appear to be considerably later than any from Olynthus; *Hesperia*, III, 1934, p. 319 and fig. 5, A 26 seems slightly later, with more contracted foot. Compare also Chatby no. 162, Breccia, *op. cit.*, pl. LVI, 120.

- 6, 5. *Black-Glazed One-Handler*, Pl. 51 c.

Inv. P 17704. H. 0.043 m. Diam. 0.104 m.

Complete except for chips. Ring foot grooved underneath. Black glaze over all except a band above the foot. Traces of stacking in the kiln on the floor. A slightly later one-handler is *Hesperia* III, 1934, p. 318 and fig. 4, A 24.

- 6, 6-8. *Saucers with Furrowed Rim*. Not Illustrated.

Inv. P 17707-709. H. 0.02 to 0.027 m. Diam. 0.149 to 0.154 m.

Saucers with ring foot, flat floor, and furrowed rim; two grooves under the rim of No. 7. Dull black glaze over all except reserved rims.

- 6, 9-10. *Banded Plates*. Not Illustrated.

Inv. P 17710-711. H. 0.027 and 0.02 m. Diam. 0.127 and 0.115 m.

Both plates fragmentary and burned. Flat bottom and ribbon handles added at rim. Broad glaze bands inside; the outside unglazed.

- 6, 11-12. *Small Pyxis and Lid*. Pl. 51 c.

Inv. P 17718-719. Pyxis: H. 0.037 m. Diam. 0.044 m. Lid: H. 0.037 m. Diam. 0.055 m.

Pyxis and lid similar to 2, 6, Pl. 50 b. They do not belong together; the lid is too large, and of different fabric and glaze from the pyxis.

- 6, 13. *Miniature Cooking Pot*. Not Illustrated.

Inv. P 17721. H. 0.071 m. Diam. rim 0.059 m.

Fragments missing. Similar to 1, 7, Pl. 50 a, but deeper. Micaceous cooking ware fabric.

- 6, 14. *Miniature Casserole and Lid*. Not Illustrated.

Inv. P 17720. H. 0.026 m. Diam. rim 0.11 m.

Similar to 1, 8, Pl. 50 a; coarse micaceous red clay.

- 6, 15-20. *Miniature Saucers*. Not Illustrated.

Inv. P 17712-717. H. 0.013 to 0.018 m. Diam. 0.067 to 0.069 m.

Shallow saucers with flat bottoms left rough; poor glaze over all.

PYRE 7

7. House C, Room 4. Pl. 49 b.

Pit: roughly lozenge-shaped, measuring across from corner to corner 1.15 m. and 0.80 m. Depth as preserved 0.15 m. The floor of the pit reddened and hardened by fire.

Level: the pit lay at the east side of the room, close beside the east wall of the house (west drain wall). It had evidently been cut through a layer of earth which had accumulated after the abandonment of House C, and which overlay the foundations of the partition wall between Rooms 4 and 6. The pit was deep enough to cut into the level beneath, the floor of the last period of the house. After the pyre had been burned, the late level through which the pit had been cut was evidently patched and continued in use; there was no evidence that a new floor had been laid.

Deposit: underlying the layer of small burned pots a layer of wood carbon, including a large bit of a burned log. Ash and cinders among the pots; small fragments of burned bone scattered throughout. The bones could not be identified. Evidently the pots had been thrown on the pyre after the fire had died down.

Dating: the pyre lay at about the same level as Pyre 8 in Room 6. The pots find parallels in Agora Groups A and B, and in Chatby cemetery. The lamps belong to types in use in the later fourth century B.C. The pyre was probably made at about the turn from the fourth to the third century.

Offerings:

7, 1. *Lamp, Type VII B*. Pl. 52 a.

Inv. L 4354. H. 0.053 m. L. 0.098 m.

Burned; small fragments of the wall, and most of the pierced lug at the left side missing. Raised base, ball-shaped body, grooves around the rim, no handle. Unglazed, except inside. Cf. Broneer, *Corinth*, Vol. IV, Part 2, *Terracotta Lamps*, pp. 45 f. and pl. III. The later unglazed lamps (VII B) from the Agora seem to have continued into the third century B.C.

Cf. also *Hesperia*, III, 1934, p. 322 and fig. 7, A 43.

7, 2. *Lamp, Type VIII*. Pl. 52 a.

Inv. L 4355. H. 0.043 m. L. 0.096 m.

Intact, though much burned. Low base, with flat rim grooved at outer edge, pierced lug at left side, no handle. Glaze inside only. According to Broneer, *op. cit.*, p. 47, lamps of this type belong at the transition between the Greek and the Hellenistic lamps: perhaps the beginning of the third century. Cf. also *Hesperia*, III, 1934, p. 322 and fig. 7, A 45.

7, 3. *West Slope Askos*. Pl. 52 a.

Inv. P 18573. H. to lip 0.10 m. Max. diam. 0.079 m.

Small fragments missing. Low flaring ring foot, round body, long wide neck and trefoil mouth. Rolled handle from shoulder to back of mouth. Good black glaze, somewhat peeled and burned; around the neck a necklace with pendants in thinned clay paint. For a similar askos with West Slope decoration cf. *Ath. Mitt.*, XXVI, 1901, p. 77, no. 23.

7, 4. *Black-Glazed Kantharos*. Pl. 52 a.

Inv. P 18570. H. 0.096 m. Diam. rim 0.069 m.

Small fragments of body missing. Moulded base with high stem; vertical handles with projecting thumb-rests on top. Good glaze, black to reddish, over all; scraped grooves around the base and under it.

7, 5. *Ribbed Kantharos, West Slope Decoration*. Pl. 52 a.

Inv. P 18571. H. 0.096 m. Diam. rim 0.068 m.

Parts of the handles, and small chips missing. Burned; the decoration almost all worn off. Shape similar to No. 4 above, but the lower body ribbed, the ribbing made by grooves

gouged in the surface of the wall. On the upper wall front and back a wreath of leaves in thinned clay paint. Nos. 4-5 find parallels in Agora Group A, coming between A 28 and A 29; *Hesperia*, III, 1934, p. 319 and fig. 5. Also comparable Chatby no. 165, Breccia, *op. cit.*, pl. LIII, no. 103.

7, 6. *West Slope Kantharos*. Pl. 52 a.

Inv. P 18572. H. as restored 0.085 m. Diam. rim 0.062 m.

The base and most of the handles, missing and restored. High-swung cup handles rising above the rim and sharply in-turned. Flaring lip with profiled overhang. Excellent black glaze over the outside only; the inside was never glazed. A scraped groove around the lower body; West Slope decoration on the wall at either side, three dolphins above a garland. Comparable in shape, B 17, *Hesperia*, III, 1934, p. 337 and fig. 18; for the lip, B 20, *ibid.*, p. 338 and fig. 18; for the dolphin decoration, B 3, *ibid.*, p. 334 and figs. 15-16.

7, 7-8. *Small Lidded Pyxides*. Pl. 52 a.

Inv. P 18574-575. H. overall 0.061 and 0.079 m. Diam. rim 0.058 and 0.067 m.

Both mended from many pieces, and burned. Small pyxides on tall solid bases, flaring in profile; the rims flanged to receive the knob-handled lids. No. 8 deeper and taller than 7; its lid, small and of different glaze and fabric from the pyxis, did not originally belong.

7, 9-12. *Banded Plates*. Not Illustrated.

Inv. P 18576-579. H. 0.019 to 0.029 m. Diam. 0.126 to 0.134 m.

Roughly wheel-made plates with ribbon handles at the rim, similar to 1, 5 and 6, Pl. 50 a. All badly burned and broken; the only traces of glaze are on the handles, and the floors were apparently not banded.

7, 13. *Small Coarse Jug*. Pl. 52 a.

Inv. P 18580. H. 0.104 m. Diam. rim 0.043 m.

Intact. Low base and wide straight neck with round mouth and moulded rim; one vertical handle. Micaceous buff clay, unglazed. A miniature copy of a common type of water or wine jug: cf. *Hesperia*, III, 1934, p. 325 and fig. 8, A 53; p. 342 and fig. 23, B 39.

7, 14. *Lidded Bowl*. Not Illustrated.

Inv. P 18581. H. overall 0.063 m. Diam. rim 0.142 m.

Both bowl and lid mended from many pieces. Convex bottomed bowl without handles; slightly flared at the rim, and grooved inside to receive the convex lid with button handle. Very fine thin fabric covered inside with a streaky wash of glaze.

7, 15-17. *Small Coarse Lidded Bowls*. Not Illustrated.

Inv. P 18586-588. H. overall 0.056 to 0.064 m. Diam. rim 0.089 to 0.097 m.

Small flat-bottomed bowls with flared rims flanged inside to receive the lids, no handles. Pinkish-buff clay, unglazed.

7, 18-21. *Miniature Cooking Pots*. Not Illustrated.

Inv. P 18582-585. H. 0.061 to 0.075 m. Diam. rim 0.051 to 0.06 m.

Buff clay, unglazed; similar to 1, 7, Pl. 50 a, but deeper.

7, 22-36. *Miniature Saucers*. Not Illustrated.

Inv. P 18589-603. H. 0.011 to 0.018 m. Diam. 0.056 to 0.101 m.

Miniature saucers similar to 1, 9, Pl. 50 a, but unglazed.

PYRE 8

8. House C, Room 6.

Pit: approximately square, measuring 0.85 x 0.85 m. Depth 0.25 m. Sides and floor baked hard by fire.

Level: the pit had been cut through a layer which had accumulated after the abandonment of House C, running over the foundation of the wall between Rooms 4 and 6. It also went through the floor of the latest period of the house. A new thin flooring of clay had been laid down after the cremation.

Deposit: the small burned pots overlay the heaviest deposit of cinders as though they had been thrown on after the fire had died down. Small fragments of bone were found in the heavy deposit of ash and cinders; some were identified as bits of animal bones, others possibly of human.

Dating: the thin flooring of clay laid to cover the pyre produced five coins: two Athenian coins dated in the last third of the fourth century, one Athenian coin to be dated between 335 and 295 B.C., and two of Greek fabric not closely identifiable. The two pots, Nos. 2 and 3, find parallels in the last quarter of the fourth century, notably from the Chatby cemetery in Alexandria. The pyre was evidently burned at some time toward the end of the fourth century, or at the turn from the fourth to the third.

Offerings:

8, 1. *Dummy Poros Alabastron*. Pl. 52 b.

Inv. ST 418. H. 0.248 m. Diam. lip 0.066 m.

Complete except for chips from the lip; traces of burning. Three grooves at the shoulder. The body solid, with a shallow hollowing at the mouth. A hollow in the bottom suggests that the alabastron was made by turning.

8, 2. *Mesomphalic Black-Glazed Cup*. Pl. 52 b.

Inv. P 18539. H. 0.069 m. Diam. rim 0.094 m.

Intact except for chips from the rim at the

side. Convex lower body with petal ribbing. High upper wall, slightly concave, continuous with sharply flaring lip. No handles. A scraped groove around the depression on the bottom, and two more on the shoulder. Firm black glaze, mottled with red on one side. For similar mesomphalic cups found in the Chatby cemetery, nos. 189, 191, cf. Breccia, *op. cit.*, pl. LVI, 118, 124.

8, 3. *Black-Glazed Kantharos*. Pl. 52 b.

Inv. P 18542. H. 0.091 m. Diam. 0.085 m.

Mended from many pieces; a fragment missing from one side and chips. Moulded ring base, rounded lower body, nearly vertical upper wall turning slightly outward to form a plain rim. Doubled rolled vertical handles with shouldering at the rim and small spool shaped rotelle as thumb rest on top of each. Good black glaze; two scraped grooves around the base, and another under it. A similar kantharos from the Agora was found in Group A, dated at the turn from the fourth to the third century: *Hesperia* III, 1934, p. 319, A 28, and fig. 5. Compare also Chatby no. 174 Breccia, *op. cit.*, pl. LV, 110.

8, 4. *Black-Glazed Pyxis and Lid*, Pl. 52 b.

Inv. P 18543. H. overall 0.057 m. Max. diam. 0.058 m.

Complete except for chips; burned. Pyxis on high solid base; rim flanged to receive lid. Glazed over all, except resting surface.

8, 5-6. *Saucers with Furrowed Rim*. Pl. 52 b.

Inv. P 18544-545. H. 0.018 and 0.021 m. Diam. rim 0.125 and 0.132 m.

Both mended; traces of burning. Low ring foot on No. 5, No. 6 flat bottomed. The rims of both double grooved and reserved; thin streaky glaze wash on floor.

8, 7-8. *Banded Plates*. Pl. 52 b.

Inv. P 18546-547. H. 0.024-0.026 m. Diam. 0.126-0.129 m.

Both mended from many pieces; burned. Roughly made flat-bottomed shallow plates with plain rims and two ribbon handles attached at the rim. Unglazed except for wide double bands on the floor, and glaze on the handles. Glaze thin red to black.

8, 9-10. *Miniature Cooking Pots*. Pl. 52 b.

Inv. P 18540-541. H. 0.062-0.063 m. Diam. 0.093 and 0.098 m.

Both intact save for small chips. Squat round-bottomed pots with round mouth and single handle. Cooking ware fabric.

8, 11-12. *Miniature Lidded Casseroles*. Pl. 52 b.

Inv. P 18548-549. H. overall 0.043 and 0.055 m. Diam. rim 0.091 and 0.093 m.

Flat bottomed pots with spreading sides, the walls flanged inside well below the rims to take the lids. Single vertical loop handles; lids slightly domed with knob handles, No. 11 of ordinary Attic clay, No. 12 of cooking ware fabric.

8, 13-16. *Miniature Saucers*. Pl. 52 b.

Inv. P 18550-553. H. 0.012-0.015 m. Diam. 0.058-0.06 m.

Roughly wheel-made saucers with flat bottoms and low spreading walls. Thin dull glaze, red to black, over all.

PYRE 9

9. House C, Room 12.

Pit: a round pit of Byzantine times had gone through most of the southern part of Room 12. Between the pit and the west wall of the house a narrow strip of undisturbed filling was preserved, in which lay the pit made for a pyre. The eastern side of the pyre had been destroyed by the Byzantine pit; its diameter from north to south was only 0.42 m., but the cremation pit may originally have been considerably bigger. Burning on the floor and sides of the pit, which was less than 10 cm. deep, showed that the fire had been burned on the spot.

Level: about 15 cm. below the level of the terrazzo floor of Room 12. The floor may not have extended as far south as the cremation pit; a rough wall foundation ran eastward between pit and southern edge of the floor as preserved. Room 12 probably continued in use as a shop after the rest of the house had been abandoned; it was curtailed toward the south, and the position of the pyre was outside the small shop or room which continued in use.

Deposit: ash and wood carbon in the bottom of the pit; mixed among them slivers of burned bones which could not be identified; two pots and a lamp on top of the burning.

Dating: the pyre was probably burned shortly before the middle of the third century. The lamp is of a type prevalent in that century; the West Slope Kantharos is later than any in Agora Group B of the first quarter of the century, while the lamp is earlier than those from Group C of the beginning of the second century.

Offerings:

9, 1. *Lamp, Type IX*. Pl. 52 c.

Inv. L 4399. H. 0.044 m. L. 0.116 m.

Badly burned; the pierced lug at the left side broken off. Clam-shell variety on high base; groove around the filling hole. Black glaze over all, except bottom. Cf. Broneer, *op. cit.*, pp. 47 ff.

9, 2. *West Slope Kantharos*. Pl. 52 c.

Inv. P 19041. H. 0.088 m. Diam. rim 0.074 m.

Small fragments of body and rim missing. High ring foot; groove at junction of upper and lower body; plain rim. Masks as thumb-rests on top of the handles. Garland in thinned clay paint front and back in the handle zone. Somewhat later in shape and decoration than B 4, *Hesperia* III, 1934, p. 335 and fig. 15.

9, 3. *Saucer with Furrowed Rim.* Pl. 52 c.

Inv. P 19042. H. 0.023 m. Diam. 0.129 m.

Burned; much of the rim and floor missing.

High ring foot and flat floor; rim double-furrowed on top, and very slightly outward-slanted. Streaky glaze on the floor only.

PYRE 10**10. South of Archaic Cemetery.**

Pit: the pyre lay in the area of the workshop of latest Hellenistic times which used three basins set into the ground, and surrounded by a flooring of cement to make liquid drain into the basins. The pyre was considerably earlier than the workshops, and had been covered by its cement floor; for which reason it was not possible to measure the area of the pit.

Deposit: a heavy layer of ash and charred wood underlay the small pots, which had been thrown on the fire after it had died down. Small bits of charred bone, unidentifiable, were found throughout the burned mass.

Dating: the lamp and the kantharos with knotted handles, which finds parallels in the Chatby cemetery, suggest that the pyre was burned near the end of the fourth century.

Offerings:

10, 1. *Lamp, Type VII B.* Pl. 53 a.

Inv. L 4060. H. 0.036 m. L. 0.072 m.

Low raised base and ball-shaped body; no handle or lug. Groove around rim; glazed inside only.

10, 2. *Black-Glazed Kantharos.* Pl. 53 a.

Inv. P 16732. Pres. H. 0.075 m. Diam. rim 0.084 m.

Base and small fragments from the body missing. Rounded lower wall, slightly flaring upper body with plain rim, outward curved. Double rolled handles, each with a reef-knot near the top and shouldering on the rim. Black glaze over all; scraped groove above the base. Compare the kantharoi with similar knotted handles from the Chatby cemetery, nos. 174-175, Breccia, *op. cit.* pl. LV, 110 and 112.

10, 3. *Small Lidded Pyxis.* Pl. 53 a.

Inv. P 16733. H. overall 0.056 m. Diam. 0.057 m.

High solid base and rim flanged to hold lid. Black glaze over all except top of knob handle of lid.

10, 4. *Banded Plate.* Pl. 53 a.

Inv. P 16734. H. 0.035 m. Diam. 0.12 m.

About half preserved, with flat bottom and one ribbon handle added at the plain rim. Glaze bands on floor, glaze on handle.

10, 5-8. *Saucers with Furrowed Rim.* Pl. 53 a.

Inv. P 16735-738. H. 0.014-0.015 m. Diam. 0.116-0.118 m.

Shallow carelessly made saucers, flat bottomed, with flattened rims grooved on top. Wash of dull glaze, red to brown and black, over all. Thin fabric, somewhat warped in firing.

10, 9. *Miniature Cooking Pot.* Not Illustrated.

Inv. P 16741. H. 0.066 m. Diam. 0.105 m.

Squat rounded body, round at the bottom; slightly flaring rim, round mouth, one vertical handle. Coarse micaceous cooking ware fabric. Similar to 8, 9-10, Pl. 52 b.

10, 10. *Miniature Casserole.* Not Illustrated.

Inv. P 16742. H. 0.049 m. Diam. 0.109 m.

Coarse micaceous cooking ware fabric. No lid was found. Similar to 8, 11-12, Pl. 52 b.

10, 11-12. *Miniature Saucers, Glazed.* Not Illustrated.

Inv. P 16739-740. H. 0.01-0.011 m. Diam. 0.059 m.

Flat bottom, showing wheel grooves, and plain rim. Dull glaze, much peeled.

PYRE 11

11. House G, Court, South.

Pit: preserved dimensions 0.70 by 0.45 m.; the full outline of the pit had been destroyed by cutting-down from above in late times. Traces of burning on its floor showed that the fire had taken place on the spot.

Deposit: the pit had evidently been cleaned out and refilled after the pyre was burned. There was no heavy deposit of ashes and charcoal at the bottom, as was usually the case; but a liberal sprinkling of large cinders was scattered among the pots.

Dating: the deep pointed skyphos No. 1, with in-curving wall at the rim, is the only datable pot, and it suggests that the pyre was burned toward the end of the fourth century.

Offerings:

11, 1. *Black-Glazed Skyphos*. Pl. 53 b.

Inv. P 19862. Pres. H. 0.087 m. Diam. rim 0.076 m.

Foot and parts of body and one handle missing. Corinthian type, drawn in toward the rim and with deep pointed body; the handle attachments set close together, the handles spreading outward. Good black glaze; a zone with cross-hatching above the foot. Comparable in shape and decoration to 4, 3, Pl. 51 a.

11, 2. *Lid of Small Pyxis*. Pl. 53 b.

Inv. P 19867. H. 0.036 m. Diam. 0.068 m.

Fragments missing. Small domed lid with knob handle, glazed inside and out. No fragments were found of the pyxis to which the lid belonged.

11, 3. *Banded Plate*. Pl. 53 b.

Inv. P 19868. H. 0.02 m. Diam. 0.13 m.

Part of rim, and one handle, missing. Flat bottom; roughly made on wheel, the bottom very rough and irregular. Plain rim and ribbon handles at rim. Glaze bands on floor, glaze on handle.

11, 4. *Black-Glazed Saucer*. Pl. 53 b.

Inv. P 19878. H. 0.018 m. Diam. 0.15 m.

Ring foot, grooved beneath. Flat floor with slightly raised rim rounded on top; the exterior profiled. Thin dull black glaze over all; two bands of rouletting on floor.

11, 5-6. *Miniature Cooking Pots*. Not Illustrated.

Inv. P 19863-864. H. 0.062 m. Diam. of 5, 0.097 m.

No. 6 fragmentary, all the mouth missing. Coarse micaceous cooking ware fabric. Similar in shape to 8, 9-10, Pl. 52 b.

11, 7. *Miniature Casserole with Lid*. Not Illustrated.

Inv. P 19865. H. overall 0.048 m. Diam. 0.092 m.

Micaceous cooking ware fabric. Similar to 8, 11-12, Pl. 52 b.

11, 8. *Lid of Miniature Casserole*. Not Illustrated.

Inv. P 19866. H. 0.02 m. Diam. 0.077 m.

Similar to the lid of No. 7; the casserole itself was not found.

11, 9-11. *Plain Saucers*. Pl. 53 b.

Inv. P 19869-871. H. 0.014-0.017 m. Diam. 0.117-0.118 m.

Flat-bottomed saucers with slightly raised rim and flat floor, the bottoms rough from the wheel. Poor thin glaze wash inside only. Thin fabric, somewhat warped in firing.

11, 12-17. *Miniature Saucers*. Not Illustrated.

Inv. P 19872-877. H. 0.014-0.017 m. Diam. 0.06-0.064 m.

Small saucers, roughly made on the wheel, and covered over all with thin dull glaze.

PYRE 12

12. House G, Court, North.

Pit: the pit measured 0.51 m. in width, with a preserved length of 0.47 m.; its north end had been cut through by the trench for the foundation of the free-standing shed in the court. Its depth was 0.25 m.; since the pit had been cut in the hard-packed marble-workers' fill of chips and marble dust its limits were very clear. Traces of burning on the floor and sides of the pit. After the pyre had been burned the floor over it was patched, the patch discernible as a slightly darker area in the floor of the court.

Deposit: the pit was full of small pots mixed with charcoal and ash; but there was no very heavy burned deposit at the bottom. Part of the poros alabastron, No. 1, was found in the wall trench of the shed; no doubt some of the contents of the pit became scattered when its north end was cut away.

Dating: the black-glazed skyphos No. 3, deep and narrow at the bottom, is somewhat more developed than those from Pyre 4, and must date from near the end of the fourth century.

Offerings:

12, 1. *Dummy Alabastron of Poros*. Not Illustrated.

Inv. ST 460. Pres. H. 0.108 m. Diam. 0.053 m.

The bottom and lower half of the body preserved, burned. A shallow hole at the bottom suggests that the alabastron was made by turning.

12, 2. *Black-Glazed Cup-Kantharos*. Pl. 53 c.

Inv. P 20141. H. 0.08 m. Diam. 0.105 m.

Fragments missing. Open bowl nearly hemispherical and with plain rim, on a moulded base. Grooved on the underside. Horizontal rolled handles, up-swung and turned inward at the top. Black glaze over all; a scraped groove around the base. Similar to 1, 1, Pl. 50 a; per-

haps somewhat later, but earlier than anything else in Pyre 12.

12, 3. *Black-Glazed Skyphos*. Pl. 53 c.

Inv. P 20142. H. 0.088 m. Diam. 0.075 m.

Small fragments missing. Deep skyphos elongated at the bottom; projecting ring foot. The lip turned outward. Widely spreading handles, squared at the outside. Black glaze over all. Similar to 6, 3-4 above, Pl. 51 c, and also to Chatby no. 162, Breccia, *op. cit.*, pl. LVI, 120.

12, 4. *Small Lidded Pyxis*. Pl. 53 c.

Inv. P 20143. H. overall 0.072 m. Diam. 0.066 m.

Solid flared base and rim flanged to hold lid. Thin dull glaze, black to brown, over all.

12, 5. *Saucer with Furrowed Rim*. Pl. 53 c.

Inv. P 20144. H. 0.015 m. Diam. 0.125 m.

Ring foot and flat shallow floor. The rim flat and grooved on top, slanted slightly outward. Dull red glaze on floor; the rim reserved; the wall outside grooved and banded.

12, 6-7. *Banded Plates*. Pl. 53 c.

Inv. P 20145-146. H. 0.021 and 0.024 m. Diam. 0.118 and 0.116 m.

No. 6 nearly complete, No. 7 fragmentary. Flat bottoms, left rough, and rather deep bodies. Plain rims and ribbon handles. Glaze on the handles only.

12, 8. *Miniature Casserole and Lid*. Not Illustrated.

Inv. P 20147. H. overall 0.062 m. Diam. 0.09 m.

Similar to the miniature casseroles from other pyres, but made of fine buff clay instead of micaceous coarse ware.

12, 9. *Miniature Saucer*. Pl. 53 c.

Inv. P 20148. H. 0.016 m. Diam. 0.099 m.

Roughly wheel-made; flat bottom. Unglazed.

12, 10-12. *Miniature Saucers*. Not Illustrated.

Inv. P 20149-151. H. 0.013 to 0.018 m. Diam. 0.058 to 0.065 m.

Similar to No. 9, but smaller. Unglazed.

PYRE 13**13. North of House G.**

Pit and level: the mass of small pots was found in a filling of Hellenistic times, evidently disturbed though intact as a group. The pit itself was not found, though it must have been very near where the group of pots was found, else they would have become scattered. Plentiful cinders and charcoal mixed in the earth among the pots indicated that they had come from a pyre, as did also traces of burning on the pots themselves.

Dating: the small West Slope Kantharoi and the unguentarium find parallels in the first quarter of the third century.

Offerings: The group has been illustrated, *Hesperia*, XVII, 1948, pl. 46, 3.

13, 1. *Lamp, Type VIII*. Pl. 54 a.

Inv. L 4335. H. 0.035 m. L. 0.095 m.

Small bits missing. High base, slightly concave beneath and finished with a raised disc at the center; flat top, a groove around the outer edge; pierced lug at left side, no handle. Glaze inside only. Similar to 7, 2, Pl. 52 a.

13, 2. *Black-Glazed Kantharos*. Pl. 54 a.

Inv. P 18456. H. 0.118 m. Diam. 0.078 m.

Small fragments missing. Slender type, on high base, moulded. Spurred handles from the lip. Dull glaze, black to red, over all; scraped grooves around the base and under it. A similar kantharos from Agora group A, *Hesperia*, III, 1934, p. 319 and fig. 5, A 29.

13, 3-4. *West Slope Kantharoi*. Pl. 54 a.

Inv. P 18455 and 457. H. 0.07 and 0.085 m. Diam. 0.065 and 0.078 m.

Small fragments missing from both. No. 3

decorated with mask thumb rests on handles, No. 4 with ivy leaf thumb rests. A wreath in thinned clay paint around the upper wall of each; a scraped groove around No. 4 below the handle attachments.

13, 5. *Unguentarium*. Pl. 54 a.

Inv. P 18472. H. 0.115 m. Diam. 0.065 m.

Fragments missing. Plump type, on a neatly made foot. Decoration in white and purple bands around level of greatest diameter and shoulder. Shape as Chatby no. 87 a (A), Breccia, *op. cit.*, p. 48, fig. 35.

13, 6. *Small Lidded Pyxis*. Pl. 54 a.

Inv. P 18468. H. overall 0.063 m. Diam. 0.05 m.

Deep pyxis on solid base left rough underneath; flange at rim to hold lid. Neither pyxis nor lid glazed; much greyed from burning.

13, 7-8. *Saucers with Furrowed Rim*. Pl. 54 a.

Inv. P 18458-459. H. 0.02 m. Diam. 0.125 and 0.13 m.

Ring foot and flat floor rising at the sides to flat rim, grooved on top; the rim of No. 8 nearly horizontal, that of No. 7 outward slanting. Black to reddish glaze on floors only; outsides, and upper faces of rims, reserved.

13, 9-10. *Banded Plates*. Pl. 54 a.

Inv. P 18473-474. H. 0.025 m. Diam. 0.12 and 0.117 m.

Small fragments missing from both. Flat bottoms and rather deep bodies with plain rims and ribbon handles. Traces of poor thin glaze on handles only.

13, 11. *Small Plain Jug.* Pl. 54 a.

Inv. P 18471. H. 0.125 m. Diam. 0.092 m.

Low base and high neck with round mouth; a raised ring below the slightly flared rim. One vertical handle. Glaze on the inside of the neck only. Similar to 7, 13, Pl. 52 a.

13, 12-13. *Miniature Cooking Pots.* Not Illustrated.

Inv. P 18469-470. H. 0.06 and 0.055 m. Diam. 0.09 and 0.085 m.

Similar to the miniature cooking pots from other pyres, but made of buff clay instead of coarse micaceous cooking ware fabric.

13, 14-15. *Miniature Casseroles with Lids.* Not Illustrated.

Inv. P 18475-476. H. over all 0.06 and 0.055 m. Diam. 0.089 and 0.083 m.

Similar to the miniature casseroles from the other pyres, but made of buff clay instead of cooking ware.

13, 16-23. *Miniature Saucers.* Not Illustrated.

Inv. P 18460-467. H. 0.008 to 0.013 m. Diam. 0.05 to 0.096 m.

All unglazed.

PYRE 14**14. North Edge of Piraeus Street.**

Pit: the pyre lay in Piraeus Street just to the west of the bridge, and near the north edge of the street. The pit could barely be made out as a roughly oblong cutting 0.42 m. wide by 0.51 m. long, its floor hardened by fire. Over a considerable area around the pit there were large patches of charcoal, suggesting that the pit had never been very deep, and that its contents were well scattered before it was covered over. Its dimensions may have been somewhat greater than those of the part cleared by us.

Deposit: as noted above, the charcoal from the pit had become well scattered over a considerable area around the pit; probably much of the pottery was lost. The three objects found in the pit were shattered into many small pieces, perhaps by the passing of traffic in the street over them.

Dating: the West Slope kantharos and the lamp suggest a date in the first half of the third century.

Offerings:

14, 1. *Lamp, Type IX.* Pl. 54 b.

Inv. L 4631. H. 0.04 m. Pres. L. 0.105 m.

Mended from many pieces; small fragments, including tip of nozzle, missing. Clam-shell variety on a low ring base; groove around filling hole and pierced lug at left side. Black glaze over all. Many pieces badly burned.

14, 2. *West Slope Kantharos.* Pl. 54 b.

Inv. P 20256. H. 0.09 m. Diam. 0.08 m.

Mended from many small pieces; small chips missing. Ivy leaf thumb rest on top of each handle; garland in thinned clay paint at each side. Much burned.

14, 3. *Saucer with Furrowed Rim.* Pl. 54 b.

Inv. P 20257. H. 0.025 m. Diam. 0.125 m.

Mended complete; greyed by fire. Low ring foot; rim nearly flat and grooved on top. Plate warped in firing. Thin glaze wash on floor only.

TOPOGRAPHICAL IMPLICATIONS

The position of the archaic cemetery on the lower slope of the Areopagus is significant because it is in a region which must always have been included within the circuit of the city walls of Athens. The dictum in the correspondence of Cicero, cited above, to the effect that from early times the Athenians had been prevented by religious usage from allowing burials to be made within the city (*intra urbem*) has been taken very seriously by scholars. The usual interpretation of the words *intra urbem* has been as meaning within the circuit of the city walls, and this is probably correct; as noted above, p. 67, in places where other remains are lacking the course of the city walls has been plotted with reference to the presence or absence of graves. This procedure is helpful in restoring the course of certain parts of the circuit of the Themistoklean and later walls. Of a city wall earlier than the one built under the leadership of Themistokles no trace has ever been found, although certain statements in literary sources²⁷ have been interpreted as implying the existence of a wall around the lower city before the Persian invasion. Hence arose a controversy in which the protagonists were Judeich and Doerpfeld, the former upholding the opinion that Athens had a peribolos before the Persian Wars, the latter denying it.²⁸ Doerpfeld, indeed, adduces the evidence even of Early Geometric graves to prove his point, from which we may infer that he thought the ban to have been in effect as early as the ninth century. Judeich, on the other hand, is inclined to connect the institution of the ban with the purification of Athens by Epimenides after the Cylonian conspiracy toward the end of the seventh century.²⁹ Since a ban on making burials within the city walls must presuppose the existence of walls when the ban came into effect, Judeich hypothecates a peribolos around the lower city at Athens as early as the seventh century.

The latest burials made in our cemetery date from the end of the sixth century. Their presence in an area which must have been included within the walls of the lower city at whatever period must prove, then, that the ban had not come into effect before these graves were made. It might be averred that our cemetery was perhaps a family graveyard which had been in use for two centuries, and that an exception was made and its use for burials was allowed to continue. Quite apart from the inherent improbability of such a theory, evidence from three other graves of the sixth century (Nos. 49-51) which were found within our area but not in the enclosed

²⁷ Herodotus IX, 13; Thucydides I, 89, 3.

²⁸ Judeich, *Topographie*², pp. 120 f.; Doerpfeld in *Festschrift Judeich*, 1929, pp. 1 f. Two of the graves in our cemetery lay at the bottom of one of the trenches made in the 1890's by Doerpfeld. They contained no pottery when we found them; and we may deduce that they had already been robbed and contained no vases by which they could be dated when Doerpfeld found them, else he would have cited them in support of his theory.

²⁹ Judeich, *Topographie*², p. 63, note 6; p. 122.

cemetery, proves that this cannot have been the case. Two of them, it is true, were graves of children—a cremation which lay just to the south of the Street of the Marble Workers as it makes its way westward up the lower slope of the Hill of the Nymphs, and an urn-burial on the slope of the Areopagus under the Roman House O. It may be argued that urn-burials of infants could have been made clandestinely, though the statement of Cicero's correspondent lays the ban to religious usage rather than to mere police regulation. The question of cremation of the bodies of small children within the city is discussed below. But one grave, No. 49, which was found in the bottom of the valley to the west of the post-Sullan drain and about 15 m. from the northwest corner of the cemetery, contained the skeleton of an adult or semi-adult person together with a lekythos which dates from after the middle of the sixth century. Thus it would seem that though the practice may have been infrequent, burials continued to be made throughout the sixth century in the area later to be included within the walls of Themistokles. Although over a great part of the American excavations digging has as yet been carried down only to Roman levels, and it is possible that more, and later, graves may be found, up to the present no burial of an adult made after the end of the sixth century has come to light. Consequently it would seem on the evidence available to date, that there was no ban on making burials within the city until the end of the sixth century. The absence of any graves later than the sixth century further suggests that the ban came into effect in the years around 500. This is not, in fact, difficult to reconcile with Judeich's theory connecting the initiation of the ban on making burial within the city with the purification of Athens by Epimenides, if we accept a later dating for Epimenides, which puts him at the end of the sixth rather than of the seventh century.⁸⁰

With the purification of the city and the prohibiting of further burials within it may have been connected a change in the style of grave monuments which took place at about the same time.⁸¹ The evidence taken all together suggests a general change in the place and manner of making graves at Athens at about the end of the sixth century.

⁸⁰ The date of Epimenides has been disputed. Plato tells us, *Laws I*, 642 D, that he visited Athens ten years before the beginning of the Persian Wars to carry out sacrifices ordered by the Delphic god. This date accords admirably with the evidence from our cemetery; but we are nowhere told specifically that the ban on burial within the walls was connected with the purification, though it is likely that it was. Furthermore, Plutarch, *Solon XII*, 4-6, makes Epimenides a contemporary of the Athenian Lawgiver, which would date him nearly a century earlier. The evidence is well summarized by J. H. Wright in *Harvard Studies in Classical Philology*, III, 1892, pp. 66 f.; Wright favors the earlier date, as does Hammond, *J.H.S.*, LX, 1940, p. 81. But Raubitschek would seem to prefer the later date: *A.J.A.* LI, 1947, p. 262.

⁸¹ Cf. Richter, *Archaic Attic Gravestones*, Cambridge, Mass., 1944, pp. 90 f., and 120 f.; also *A.J.A.* XLIX, 1945, p. 152. Miss Richter, discussing a law enacted according to Cicero *De legibus* II, 26, 64, "sometime after Solon," which limited the size and decoration of tombs, decides in favor of a Peisistratid, rather than a Kleisthenic, date for its enactment.

It has already been noted that a ban on the making of graves within the walls presupposes the existence of the walls when the ban came into effect. We must assume, then, that Athens was already enclosed within a peribolos by the end of the sixth century when the making of burials in the city came suddenly to a stop. Any conclusion beyond this enters into the realm of hypothesis and speculation; there is no evidence other than general historical probability. Peisistratos and his sons we know to have undertaken large public works of various kinds at Athens. It is not improbable that among these was the enclosing of the lower city in a defensive wall. The tyrant himself had been twice expelled from Athens; his successor Hippias had seen his brother killed as the result of a plot against the tyranny; and during the whole of the reign of the tyrant and his sons enemies were known to be plotting in exile the overthrow of the tyranny and their own return to Athens. The building of a peribolos around the lower city would therefore have been no more than a reasonable measure of self-defence on the part of the tyrants against enemies from without, perhaps led by the exiled Alkmeonidai. The account given by Thucydides (VI, 57) of the unsuccessful attempt of enemies from within, Harmodios and Aristogeiton and their followers, to overthrow the tyranny, explicitly refers to a gate at the Kerameikos and thus implies the existence of walls. Though direct evidence to prove it is lacking, it would seem very probable that Athens was first enclosed within a peribolos at some time between the second return of Peisistratos in 546 B.C., and the attempt of the Tyrannicides in 514 B.C.³²

More difficult of explanation is the fact that cremation of infants within the city continued to be permitted into Hellenistic times. The evidence from the archaic cemetery and elsewhere as noted above points to the conclusion that the burial of the dead, at least of those who had reached adult years, came to an end at about the turn from the sixth to the fifth century. An occasional urn-burial of a child made subsequent to this limit has been found in the area of the American excavations; but such urn-burials could easily have been made clandestinely. There seems, on the other hand, no likelihood that the bodies of dead infants could have been cremated in the town without the whole neighborhood knowing of it. We must conclude, therefore, that the religious ban on burial within the city either did not include a sanction against the burial of children as opposed to adults, or that it did not include a sanction against cremation as opposed to burial. The number of infant cremations found being far greater than that of urn-burials, the probability becomes greater that cremation was not banned rather than that an exception was made for children in general. No traces of the cremation of adults within the area of the American excavations later than the

³² A paper dealing with the graves found in the American excavations and their relation to the problem of a Pre-Persian city wall was read by the present writer at the annual meetings of the Archaeological Institute of America in December, 1947, at New Haven. A brief summary appeared in *A.J.A.*, LII, 1948, pp. 377-8.

sixth century have yet been found; but good sense would suggest that large pyres would be dangerous as well as unpleasant in areas thickly built up with houses, and that for reasons other than religious the cremation of adults within the city was not practised. The evidence for the cremation of infants within the city down to early Hellenistic times is, on the other hand, conclusive; and the practise after all can have been no more dangerous or unpleasant in the fourth and third centuries than it was in the sixth.

In sum, the evidence from the graves found up to the present suggests that burial and cremation in the city were unrestricted up to the end of the sixth century, and that thereafter the burial of adults ceased, probably because of the religious ban noted in Cicero's correspondence. The cremation of the dead appears not to have been included in the ban, and in fact continued until Hellenistic times in the case of infants. There is no evidence to show whether the cremation of adults ceased after the sixth century because it was included in the ban, or whether the practise was abandoned for practical reasons. The evidence in general supports the statement in Cicero's correspondence, and adds to it in particular the suggestion that the ban came into effect at about the turn from the sixth to the fifth century, and that it applied only to inhumation.

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Black-figured Kylix: Interior (Detail at actual size)

EUGENE VANDERPOOL: A BLACK-FIGURED KYLIX FROM THE ATHENIAN AGORA



Black-figured Kylix: Exterior (Detail at actual size)



General Plan of the Area, Actual State

RODNEY S. YOUNG: SEPULTURAE INTRA URBEM



a. General View of the Area, from the Northwest



b. Wall at West Side of Cemetery (C on plan, fig. 1)



c. South Wall of Cemetery (D on plan, fig. 1)



d. Fragment of Marble Sarcophagus



a. Grave A: Burial Amphora as found, under South Wall of House C



b. Geometric Amphora, A-1



c. Grave 1, Amphora



d. Graves 1 (above) and 3 (below), as found



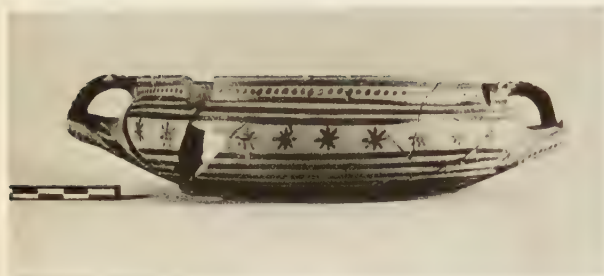
e. Fragmentary Geometric Amphora from Grave 4



B



F



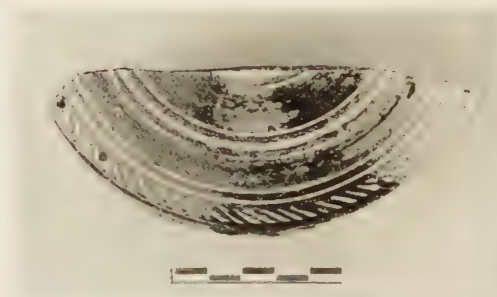
C



G



D



H



E



I

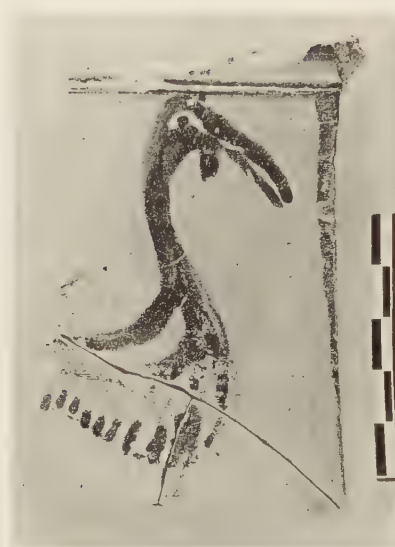
Fragmentary Geometric Pots from Grave 18 (B-I)



a. Pottery from Grave 2: 2, 1-3



b. Grave 2 as found



d. Protoattic Fragment, K, from Cemetery



c. Protoattic Fragment, J, from Cemetery



e. Protoattic Fragment, L, from Cemetery



a. Grave 4, Geometric Sherds (Amphora A, pl. 35, e) and Skull as found above Level of Burial)



b. Grave 4, showing built Walls along Sides, and Skeleton



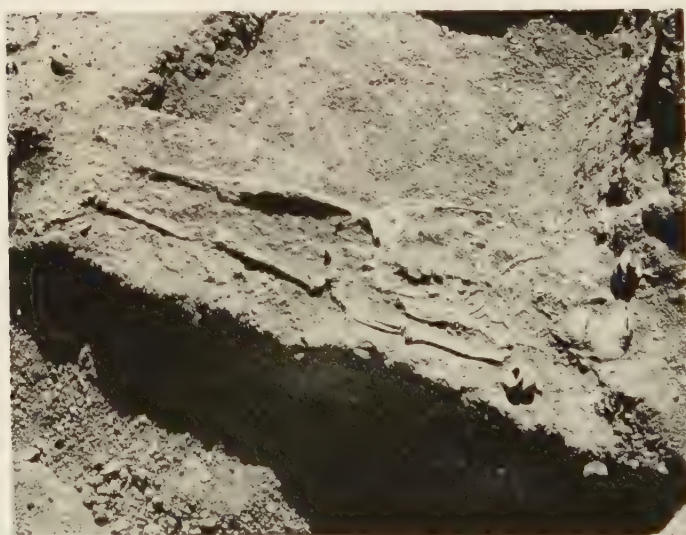
c. Amphora from Grave 3 (3, 1)



d. Corinthian Tripod Pyxis from Grave 4 (4, 1)



e. Grave 3, Amphora as found, containing Bones of Infant



f. Grave 5 from Northeast



a. Pots from Grave 5 (5, 1-2)



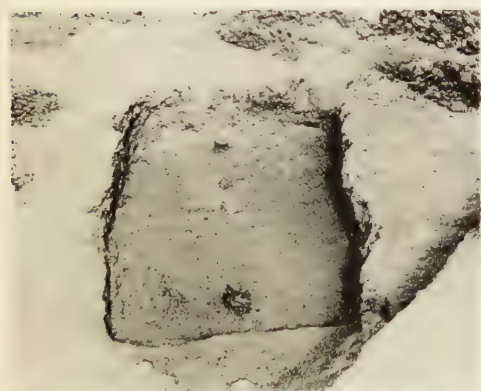
b. Pots from Grave 6 (6, 1-2)



c. Pots from Grave 8 (8, 1-2)



a. Grave 10 as cleared



c. Grave 8 as found



d. Grave 9 (at right) and Grave 23, cut through by it



b. Lekythos from Grave 7 (7, 1)



e. Band-cup from Grave 9 (9, 1)



a. Vases from Grave 10



b. Grave 11 as cleared



c. Lekythos from Grave 11



a. Vases from Grave 12



b. Pyxis 12, 7 from above



c. Grave 12 as cleared



a. Vases from Grave 13



b. Grave 14, cleared



c. Lekythos from Grave 14



a. Lekythoi from Grave 15



b. Grave 15 as cleared



c. Grave 16 as cleared



d. Lekythoi from Grave 16



a. Lekythoi and Bronze Spoon from Grave 17



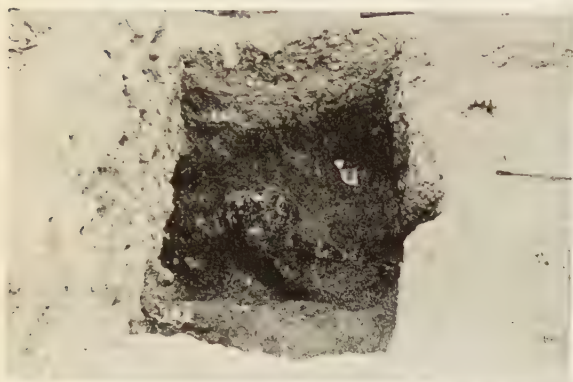
b. Grave 17, cleared



c. Burned Pottery from Pyre, Grave 18



a. Burned Pottery from Pyre, Grave 19



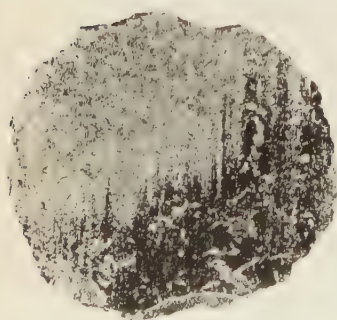
b. Grave 19: end of Grave Cutting, showing Air Channel in Short End



c. Grave 20, showing Charred Logs on Bottom of Pit for Pyre



d. Lekythos, from Grave 20



e. Pottery disk from Grave 21



f. Grave 24; at upper left Bones of Grave 21



a. Grave 27



b. Grave 39, showing Air Channel in Floor of Cremation Pit



c. Grave 49, showing Remains of Skeleton as found



d. Grave 50: Lekythoi in place in Pyre



a. Lekythos from Grave 49



b. Burned Lekythoi from Pyre, Grave 50



c. Grave 51, showing Skull of Infant in Pithos



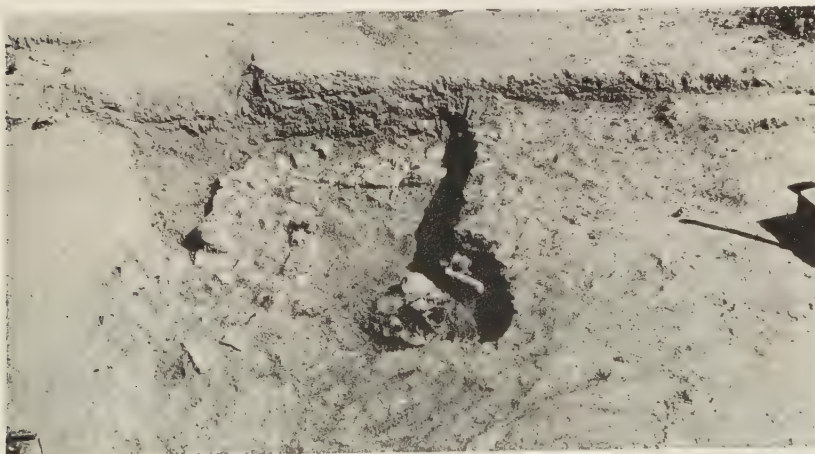
d. Pithos from Grave 51



a. Pyre No. 2, over House B



b. Pyre No. 7, in House C, Room 4



c. Pyre No. 8, in House C, Room 6



a. Pots from Pyre No. 1, in Northwest Room of Poros Building



b. Pots from Pyre No. 2, over House B



c. Pots from Pyre No. 3, in House D, Room 5



a. Pots from Pyre No. 4, in House D, Room 4



b. Pots from Pyre No. 5, in House D, Room 2



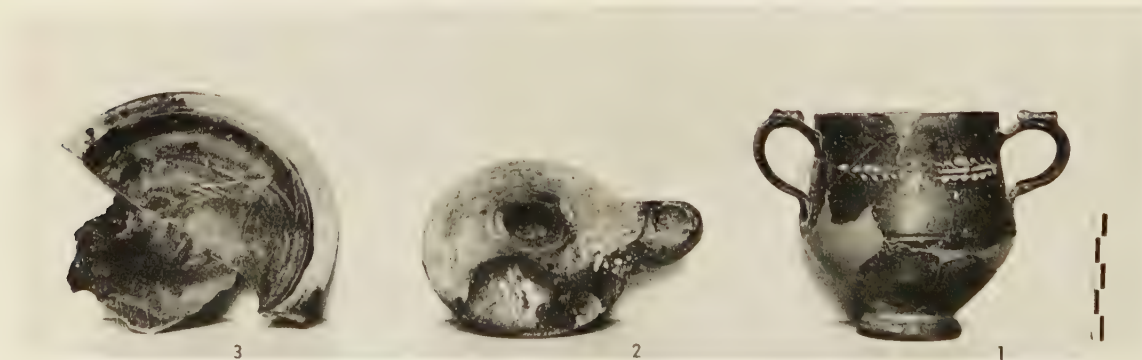
c. Pots from Pyre No. 6, in House C, Room 8



a. Pots from Pyre No. 7, in House C, Room 4



b. Pots from Pyre No. 8, in House C, Room 6



c. Pots from Pyre No. 9, in House C, Room 12



a. Pots from Pyre No. 10, South of Archaic Cemetery



b. Pots from Pyre No. 11, in House G, Court at South



c. Pots from Pyre No. 12, in House G, Court at North



a. Pots from Pyre No. 13, North of House G



b. Pots from Pyre No. 14, in Piraeus Street

RODNEY S. YOUNG: SEPULTURAE INTRA URBEM

AN INDUSTRIAL DISTRICT OF ANCIENT ATHENS

(PLATES 55-85)

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INTRODUCTION

THE large triangular area outside the limits of the ancient Market Place to the southwest, and lying in the valley between the Areopagus at the east and the Hill of the Nymphs and the Pnyx at the west, was expropriated in 1938 by the Demos of the Athenians and the Greek Government and turned over to the American School of Classical Studies as an appropriate site for the permanent museum planned to house the antiquities found in the Agora Excavations (Pl. 55 a, b). It is bounded at the north by the modern Asteroskopeion Street, at the west and southwest by the Street of the Apostle Paul, and at the east by the fence of the Areopagus Park. It measures at a maximum from north to south about 170 meters, and from east to west about

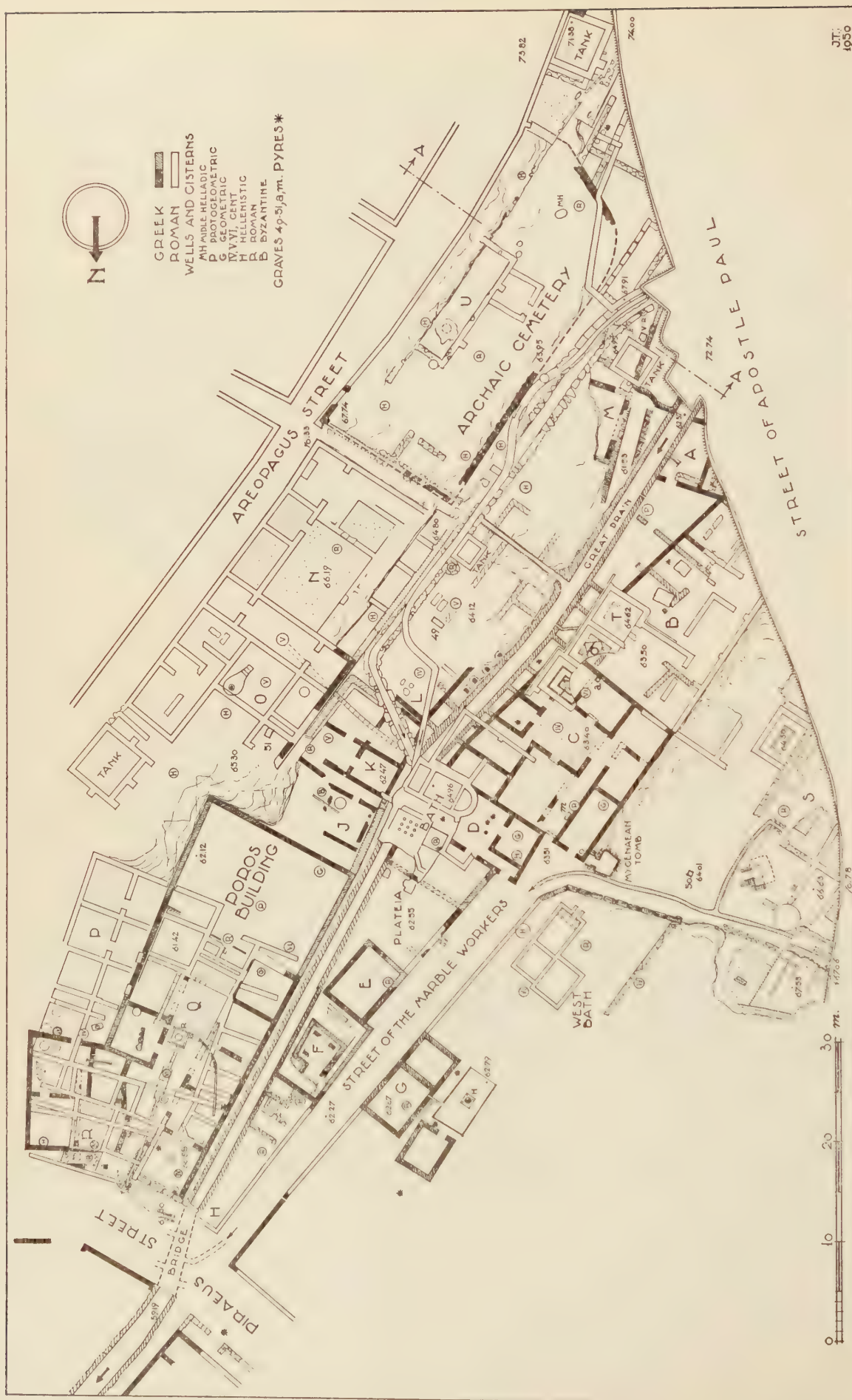


Fig. 1. General Plan of the Area, Actual State.

80 meters; the total surface area is about 7,500 square meters, or a little less than two acres. With the demolition of the modern houses the whole area to the west and northwest of the Areopagus was cleared to the line of Apostle Paul Street, so that an archaeological zone extending from the Hephaisteion at the north clear around to the Odeion of Herodes at the south, and including the old excavations of Dörpfeld, could, after exploration, be included in the park of the Areopagus and the Agora. Such clearance was most desirable, for now that the Areopagus is completely free of modern encumbrances its relation to Acropolis, Pnyx and Agora has been clarified and the physical structure of the terrain is manifest.¹

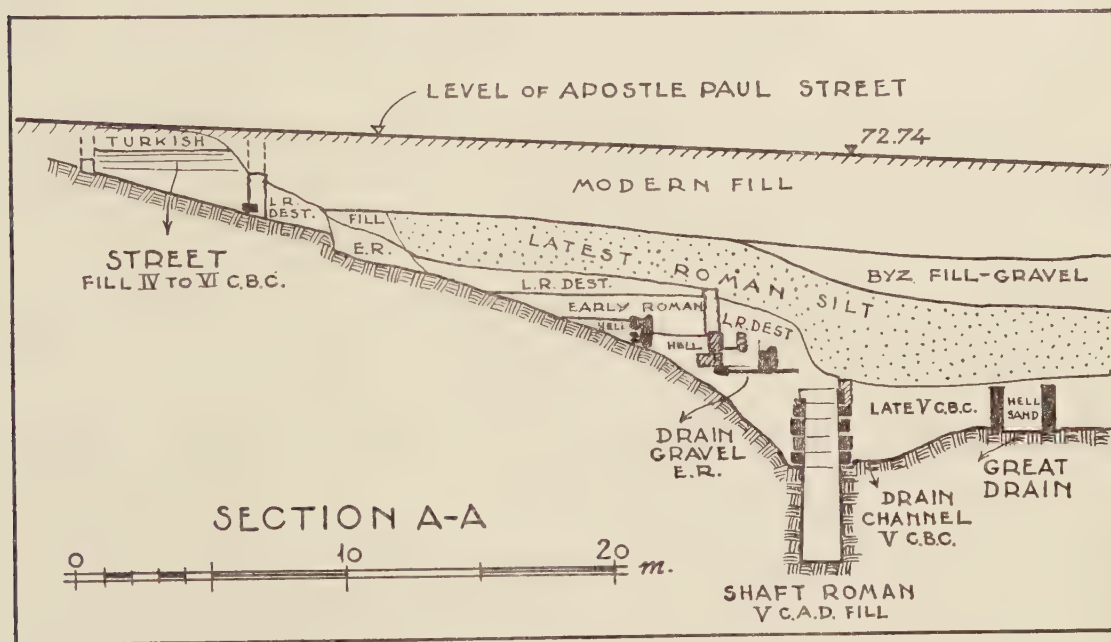


Fig. 2. East-West Section across South End of Area, Looking South at A-A (Plan, Fig. 1).

The excavation of the vast area was laborious and expensive. Nobody had foreseen the great depth of the fill, reaching in one place to a maximum of eleven meters (see section, Fig. 2). Dörpfeld, indeed, had sunk several trial trenches here many years ago, and in the later excavation it was possible to trace them; but his pits were too small and too widely scattered to allow of any conclusions at the time, and although the bits of foundations then uncovered appear on the plans of ancient Athens, no results were ever published.² The complete excavation of this large block, which

¹ This area was of course included in the zone to be reserved for excavation and park in the far-sighted plan of Kleanthes and Schaubert for the laying out of the new Athens after the liberation of Greece in 1831; cf. J. Travlos in *Hesperia*, Suppl. VIII, pp. 382 ff., plate 54.

² W. Judeich, *Topographie von Athen*², 1931, plan I; *Antike Denkmäler*, II, pl. 37.

included at the north the modern Asteroskopeion Street, was started in the early spring of 1939, and up to the present one or more excavators has devoted his time and energies to its clearance through six campaigns, the seasons of 1939 and 1940, and 1946 through 1949.³

The removal of the deep mass of earth which had accumulated mostly in late Roman and in Byzantine times has radically changed our conception of the natural contours of the area. Instead of a nearly level surface sloping gently northward between the Areopagus and the Hill of the Nymphs, we find a deep valley, narrow and with precipitous sides at the south, widening and becoming shallower toward the north, with low spurs running out toward the east and northeast from the Hill of the Nymphs, and toward the west and northwest from the Areopagus. This valley afforded the only way of easy access between the northwest and the southwest quarters of Athens; all wheeled traffic had to pass through the narrow gap between Pnyx and Areopagus. Excavation has revealed the depth of the bottom of the valley to the north of this gap, and the precipitousness of its sides, and has thus shown why the main routes skirted the lower slopes of the hills at either hand in preference to following the middle of the depression. A road no doubt followed the bottom of the valley in early times,⁴ but from the fifth century onward there was no through way by this route from the Agora and Kolonos to southwestern Athens. The area thus formed a self-contained block, bounded on three sides by important arteries. To the east passed the direct route from the Agora to the Pnyx; at the north the block was bounded by an important east-west thoroughfare connecting the quarters to the north of Acropolis and Areopagus with the Piraeus Gate at the west; and there can be no doubt that an equally important street passed along the west and southwest sides of the area, approximately on the line of the present Apostle Paul Street, to connect the southwestern quarters of Athens with the Piraeus and Dipylon Gates. These three major arteries of ancient Athens are discussed below in greater detail, pp. 145-160,

³ The entire area was originally called Section Nu Nu, and the present writer has devoted all six campaigns to its exploration. Subsequently Nu Nu was limited to the southern half and apex of the triangle, and three new sections were created: Xi Xi, a triangular area at the west side, dug in 1940 by H. S. Robinson; Omicron Omicron, the part of the northern half lying to the east of the Great Drain, dug 1947-1949 by Miss Margaret Crosby; and Pi Pi to the west of the drain, dug in 1947 by G. R. Edwards and in 1948 by Miss Mabel Lang. Thanks are due to all of these for information and advice; also to Miss Alison Frantz and H. Wagner for photographs and to John Travlos, Piet de Jong and Mrs. Clayton Whipple for plans and drawings. Brief summaries of each season's work have appeared annually in the Field Director's reports: *Hesperia*, IX, 1940, pp. 300 ff.; X, 1941, pp. 1 ff.; XVI, 1947, pp. 203 ff.; XVII, 1948, pp. 163 ff.; XVIII, 1949, pp. 215 ff. The section on the fifth century Poros Building is by Miss Margaret Crosby who continued to dig it after my departure from Athens. Peter Corbett, now of the British Museum, wrote the sections on red-figured and black-glazed pottery, so important for the dating of drain and houses.

⁴ That this was so has been suggested in *Hesperia*, XVIII, 1949, pp. 275 ff., fig. 1. But the upper reaches of this route seem to have been abandoned probably at the time of the rebuilding of Athens after the Persian sack, and the road was diverted toward the west. See below, p. 145.

167-168; for convenience of reference they have been named respectively Areopagus Street, Piraeus Street and Melite Street.

The slopes of the Areopagus above Areopagus Street to the east seem in Roman times at least to have been built up with the houses of the well-to-do; the unpublished excavations of Dörpfeld, in part included in our plan, Fig. 1, show the remains of houses elaborately decorated with painted stucco, floored with marble, and watered by capacious (and no doubt expensive) cisterns cut in the living rock of the hillside. Similar cuttings on the eastern slope of the Hill of the Nymphs opposite imply the existence there of dwellings equally elaborate. Within our area itself, at the north-west corner where a spur of the Hill of the Nymphs offers slightly higher ground, there are plentiful remains of similar commodious houses.⁵

It would appear, then, that the dwellings of the prosperous were built on the higher ground to east and west, while the lower-lying center of the valley, pierced by a minor street and narrow alleys giving access to its various parts, was built up with lesser houses, commercial establishments, and workshops. Of the activities carried on in the last we found plentiful traces from all periods; here lived and worked many of the coroplasts and bronze-workers, blacksmiths and marble cutters, of ancient Athens. So plentiful were the traces left by the workers of marble on both sides of the small street which divides the northwest corner from the rest of our area that we have named it the Street of the Marble Workers, all but yielding to the temptation to call it the Street of the Herm-Makers—the *διὰ τῶν ἑρμογλυφῶν παρὰ τὰ δικαστήρια* mentioned by Plutarch and no doubt referred to by Plato.⁶ A large building which dates from about the middle of the fifth century lies close to the Street of the Marble Workers at the east; it was probably a public building of some sort, and may possibly have been one of the Lawcourts mentioned by Plutarch in the passage quoted above.⁷

The Roman houses to the west of the Street of the Marble Workers need further exploration before they can be published; these must be left for a later study. For present purposes, then, our study is concerned with the streets bounding the area and the south branch of the Great Drain, which bisects it, as well as with the more thoroughly excavated southern and central parts of the area which contain scanty traces of early habitation, a cemetery of the Geometric and Archaic Periods at the southeast, already published in a preceding article,⁸ the remains of houses and workshops of the fifth and fourth centuries, houses and workshops of Hellenistic and Roman times, and two Roman bathing establishments. This area, lying in a hollow,

⁵ *Hesperia*, XVII, 1948, pp. 169 f.; XVIII, 1949, pp. 217 f., pl. 40.

⁶ Plutarch, *Moralia, de Genio Socratis*; X, Plato, *Symposium*, 215 A.

⁷ *Hesperia*, XVII, 1948, pp. 167-168; XVIII, 1949, pp. 218 ff. See, however, Miss Crosby's discussion below, pp. 183-187.

⁸ *Hesperia*, XX, 1951, pp. 67-134.

was less desirable than the slopes to either side, not only because it was cut off from the views to north and northeast and less airy, but also because it was exposed to the sudden freshets which descended from time to time from the slopes of the hills about. The drainage of this section of Athens was always a serious problem; it was solved eventually by the building of the south branch of the Great Drain at the very beginning of the fourth century B.C.

It may be asked, first of all, in which of the city demes was included this area which lay between three of the busiest streets of ancient Athens, and which was inhabited in large part by artisans. We were not so fortunate as to find in place a boundary stone to tell us. We know which of the demes lay in each direction: Kera-meikos to the north, Kydathenaion which included the Acropolis as is implied by its name, and perhaps also the Areopagus, to the east; Melite to the west, Kollytos to the south. Another deme, Kolonos Agoraios, lay to the north, occupying a part at least of the hill from which it took its name; it belonged, like Kollytos, to the tribe Aegeis, and those who believe the demes of a city trittys to have been contiguous would make Kollytos and Kolonos Agoraios co-terminous.⁹ Part of the hill, however, belonged to Melite: the Eurysakeion, which we are told was in Melite,¹⁰ can be approximately located a short distance to the southwest of the Hephaisteion,¹¹ where it perhaps lay partly in Melite and partly in Kolonos Agoraios. Melite, then, must have adjoined Kollytos.¹² All the eastern slopes of the Pnyx and the Hill of the Nymphs, and the Koïonos hill almost as far as the Hephaisteion, thus lay in Melite. Kollytos, bordering on Melite, probably included the old excavations of Dörpfeld at the west foot of the Areopagus, in which lay the Amyneion and the Sanctuary of Dionysos in the Marshes. The road passing through this area is the southward continuation of Areopagus and Melite Streets; it has been suggested¹³ that this is the στενωπὸς Κολλυτός which passed through the deme and took its name from it. At the gap between Areopagus and Pnyx this street divided into two, of which the western branch skirted the lower slopes of the Hill of the Nymphs, running northwestward probably to the Dipylon. Since it must either have run through the deme of Melite, or bordered it along its east side, the name Melite Street seems not inappropriate.¹⁴

There is good reason to believe that the three streets which border our area go

⁹ Cf. Judeich, *Topographie*², p. 171.

¹⁰ Harpokration, *Lexicon*, s. v.

¹¹ Ferguson, *Hesperia*, VII, 1938, pp. 1 ff., 16; also Judeich, *Topographie*², p. 44, note 2, pp. 168, 368. A reference to Kolonos may cause confusion, where it is not specified whether the hill, the district, or the deme, is intended.

¹² Strabo I, 65-66, citing Eratosthenes; a boundary stone giving the names of the two demes, one on either side, is mentioned.

¹³ Judeich, *Topographie*², p. 169, note 1.

¹⁴ στενωπὸς Κολλυτός is an example of a street taking its name from a deme through which it ran; Herodotos VI, 103, speaks of the street running through Koile: πέρην τῆς διὰ Κοίλης καλεομένης ὁδοῦ; cf. Judeich *Topographie*², p. 180.

back to early times; certainly they were there when Kleisthenes made his reforms of the Athenian constitution and made membership in a deme the first requisite of citizenship. It is generally agreed that Kleisthenes made some readjustments in the areas and proportions of some of the old demes, which had of course existed long since, and that he created other new demes, especially in the city and its suburbs.¹⁵ When he created new demes and adjusted the limits of some of the old ones he no doubt used as boundaries of division not only the natural lines suggested by the physical lay of the land, but also the main arteries of communication which already existed and made artificial divisions into sections and areas; on running a new boundary the natural thing to do is to follow the open lines of streets and roads, rather than to pass it through blocks already built up with houses. Thus Piraeus Street at the north very probably formed the southern boundary of the deme of Kerameikos. We know that the Agora lay entirely within that deme; its boundary stone, still in place at its southern limit, must therefore still be in the deme of Kerameikos. The first line of the division which suggests itself as an obvious southern limit for the deme is Piraeus Street, which passed by between sixty and seventy meters to the south, and which skirted the entire southern extremity of the later Market Place. If we accept Piraeus Street as the probable southern boundary of the deme of Kerameikos, it follows that our area cannot have been a part of that deme. The three possibilities remaining are Kolonos Agoraios, Melite and Kollytos.

Of these the first may be excluded as probably also bounded at the south by Piraeus Street, if it extended even as far to the south as Piraeus Street. Since, however, all of the Agora lay in Kerameikos and the Eurysakeion just to the southwest of the Hephaisteion lay in Melite, it becomes necessary to imagine a long narrow tongue of Kolonos Agoraios extending southward between these two demes as far as Piraeus Street, in order to make the two demes belonging to the city trittys of the tribe Aegeis meet with a common border. It is not generally agreed, moreover, that all the demes of the same city trittys were contiguous; and it is perhaps more natural to imagine Melite and Kerameikos as sharing a common boundary on the Kolonos hill to the south of the Hephaisteion, and the temenos of the temple itself as at the meeting-place of the three demes of Kolonos Agoraios, Melite and Kerameikos.

Our area, then, should be assigned either to Melite or to Kollytos. We know that the former lay to the west and the latter to the south; how far eastward Melite extended, or how far northward Kollytos, we do not know. An arrangement has been suggested to bring Kolonos Agoraios southward to meet Kollytos, which belonged to the same trittys; but this arrangement has seemed both artificial and unnecessary, and so we are not obliged to try to bring Kollytos northward to meet Kolonos

¹⁵ See in general on the demes Milchhoefer, "Untersuchungen über die Demenordnung des Kleisthenes," *Abh. preuss. Akad. Anhang*, 1892.

Agoraios. In Milchhoefer's list¹⁶ of the demes and the demesmen Melite stands fourth. The three demes which outranked it in population (as represented by the names of demesmen preserved on gravestones) are all country demes; Melite stands as the most populous of the city demes. Of the area which we know to have belonged to Melite, the eastward slopes of the Pnyx and Hill of the Nymphs, much of the space was taken up by public buildings: the Assembly Place, stoas, and various sanctuaries. The most thickly populated deme within the city¹⁷ must have covered more than this limited area. We cannot expand it to west or to south; the bulk of its population must then have been established to the east or to the northwest in the direction of the Piraeus Gate. Perhaps our area should be assigned on these grounds preferably to Melite rather than to Kollytos, which stands number 47 in Milchhoefer's list, with about one third as many names of demesmen known as from Melite. These calculations, however, are vague and unsatisfactory, and our area is not really large enough to make a great difference in population if it is subtracted from one deme and added to another. Equally unsatisfactory in determining the deme is the character of the remains found: sculptors and marble-workers are known in plenty from all the demes. Melite and Kollytos were both industrial sections of Athens, and a comparison of the lists of metics residing in both demes, whose trades are given, with the actual remains of workshops found in our area is again indecisive.¹⁸ Similarly unsatisfactory as indications of locality are casual finds from within the area. We know that there was a sanctuary of Herakles in Melite, but the finding of objects portraying the hero within our area may or may not be significant, since such objects were easily transportable.¹⁹

Though the probability is strong that Kollytos was confined to the region south of the gap between Pnyx and Areopagus, and that Melite extended eastward to the north of that point, it cannot be proved. We do not even know to which deme the Areopagus itself belonged. It might appropriately have been included with the Acropolis in Kydathenaion, in which case Areopagus Street might have been considered a

¹⁶ *Op. cit.*, pp. 6 ff.

¹⁷ Needless to say, all of the people whose names were counted in Milchhoefer's list did not necessarily live in Melite: their ancestors lived there in the time of Kleisthenes. Nevertheless, the probability is that the greater number of their descendants continued to live in Melite; and its industrial character must have drawn thither a large number of non-citizens.

¹⁸ Wilamowitz in *Hermes*, XXII, pp. 117 ff. lists the metics known from inscriptions, with their trades, by the demes in which they resided. The demes in which the greatest number of metic artisans lived were Kollytos, Skambonidai and Melite, the last with by far the greatest number; but the trades plied in Melite and Kollytos were the same.

¹⁹ An archaic marble head of Herakles: *Hesperia*, XVII, 1948, pp. 174-175, pl. XLIX—perhaps from the sanctuary itself? A terracotta plaque with Herakles mounted on a donkey, in relief: *ibid.*, p. 180, pl. LX, 2—a votive? An oinophoros bearing in relief on its sides two of the labors of Herakles: *ibid.*, pp. 183-184, pl. LXIV, found in the well of House N—perhaps merely a household object?

suitable boundary between Melite and Kydathenaion. We cannot draw any fast conclusions; the probability is that our area was a part of Melite, and the likelihood is very strong that one or more of the old-established streets which bordered it was taken as a boundary at the time of the reorganization of the demes by Kleisthenes.

EARLY HISTORY OF THE AREA

The natural configuration of the land is such that this region of Athens must have been frequented by passers-by, if not actually settled, from the very earliest times. If, as has been postulated elsewhere, and as is suggested by Thucydides,²⁰ the early town lay to the southwest of the Acropolis, then communication with the areas to the north must have been channelled through the pass between the Pnyx and Areopagus and northward through our area, probably by footpaths along the slopes of the Hill of the Nymphs and the Areopagus on opposite sides of the valley, and perhaps also by another at the bottom. These footpaths, by which the early town was approached from the north, later became suburban roads, and with the northward growth of the town finally turned into city streets. Thus we can perhaps say with some confidence that Areopagus Street at the east and Melite Street to the west of our area came into existence as early as Athens was settled.

The oldest object found in our area is a pestle or grinder of veined white marble, an implement quite characteristic of Early Helladic times.²¹ It was found in a Byzantine filling of heavy gravel, small stones, and broken tiles which we took to be waste left over after earth had been screened in Byzantine times for the making of mud bricks. All that we can conclude from this is that the Early Helladic pestle was in the earth in our area before it was screened, rather tenuous evidence on which to hypothesize settlement here so early, though there seem to be traces of Early Helladic habitation on the slopes of the Areopagus to the east. More substantial traces of habitation of the succeeding period were found: near the south end of our area (plan, Fig. 1 and above, p. 70, fig. 1) a pit dug in the bedrock contained sherds and fragmentary pots of Middle Helladic times, including Matt-Painted, Grey Minyan, and coarse wares. The pit was oval in outline, its greater diameter 1.26 m., its lesser 1.10 m.; the depth was only 1.70 m. into the hardpan. No water was found. The shallowness of the cutting and the lack of water suggest that the pit was a bothros or rubbish-pit rather than a well; its presence carries the implication that a dwelling of Middle Helladic times stood near by. Actually this pit is the westernmost of a series of pits and wells of Middle Helladic times which seems to have extended all along the north slopes of the Acropolis and the Areopagus.²² Our westernmost pit is perhaps linked with the

²⁰ *Hesperia*, XVIII, 1949, pp. 279 f.; Thucydides II, 15, 3.

²¹ Inv. ST 314. Cf. Blegen, *Zygouries*, pl. XXII, 18-21.

²² Cf. *Hesperia*, VII, 1938, pp. 335 ff. for a series of Neolithic and Middle Helladic pits and

rest of the series to the northwest of the Acropolis by a small pit or bothros which was cut in the bedrock in front of the Church of Saint Athanasios on the north-westernmost spur of the Areopagus; it produced fragments of Matt-Painted pithoi, Grey Minyan ware, and animal bones. Occasional sherds of Grey Minyan turning up in the deeper fills in the bottom of the valley may have washed down from houses which lay higher on the slope to the east.

Except for an occasional fragment of a Mycenaean pot in the earth of the deeper fillings, the only remains from Late Helladic times in our area were burials. A Mycenaean chamber tomb, a cutting in the hillside above it which may have been a second, unfinished tomb, and a cist-burial near the dromos of the first, all on the lower slope of the Hill of the Nymphs, have been mentioned elsewhere.²³

More certain traces of actual habitation on the spot were left by the Athenians of Protogeometric times. Two wells were found, each of which must have been the source of water for a near-by dwelling. Both yielded a quantity of pottery such as was used at the well-head to carry away water, especially amphorae and oinochoai, as well as drinking cups. One well lay in the bottom of the valley, just to the north of House A; the other under the north central part of the large room or courtyard at the south end of the Poros Building to the east of the Great Drain (plans, Figs. 1, 7).

Perhaps the successor of the latter Protogeometric well was another well of early Geometric times which lay only eight meters to the south, still under the south court of the Poros Building. The proximity of the two wells, one somewhat later than the other, suggests continuity of habitation in this part of the area; why the earlier well went out of use to be replaced, perhaps after an interval, by another, it is impossible to say. A third near-by well of Geometric times lay a little distance away in the southwestern room of the Poros Building proper, to the north of the court. This too may have had its place in a succession of wells used by the inhabitants of this part of the area, but it did not produce enough pottery (only one vase) to fix its place in the series. A group of wells so close together in space would be redundant if all the wells were contemporary; we must assume—and indeed the pottery shows—difference in date and the replacement of one well by another. The group, however, proves continuity of habitation.

Two more wells of Geometric times were dug, one under the westernmost room of House D, the other near the south end of the northwest corner room of House C (plan, Figs. 1, 7). Again these wells were separated by only a few meters, and they are not contemporary: the southern is considerably the earlier of the two. Thus the complexes of Protogeometric and Geometric wells in our section suggest that two

wells on the north slope of the Acropolis. The pit on the Areopagus spur which carried the church of St. Athanasios (Judeich, *Topographie*², plan I) was mentioned in *Hesperia*, IX, 1940, p. 270.

²³ *Hesperia*, XVII, 1948, pp. 163-165, pl. 45; XVIII, 1949, p. 215, pls. 38-39; XX, 1951, p. 69.

special areas, the south end of the Poros Building and the vicinity of Houses C-D, were continuously inhabited over a fairly long period during this early age, perhaps occupied by farmsteads. All the wells are set notably low in the valley; their diggers probably thought that more plentiful water would be forthcoming beside and under the line of the natural stream-bed. This stream was followed by a road or path running up the bottom of the valley; at one point along its east bank a few stones crudely thrown together form a short stretch of rough wall (plans, Figs. 1, 7), perhaps part of a parapet beside the road. In time this foundation became completely covered by the silt deposited in the stream-bed, which contained no sherds later than Geometric. The upper layers of the gravel deposit were hard-packed as though by traffic passing over a road or path. There can be no doubt that in Geometric times a roadway ran up the center of the valley, perhaps bordered at the west by a house of which no trace save its well is left. Two graves in this area, already discussed elsewhere,²⁴ may by their positions further indicate the early existence of this road, and of Areopagus Street paralleling it at the east. These streets, then, were early features of the Athenian landscape as well as important arteries, and a discussion of them follows. The Great Drain, an equally important feature of this part of Athens, was not artificially channelled or built until the fifth century; and since its earliest course as an artificial channel was materially affected by the houses which already existed when it was made, the discussion of the drain must be deferred until after that of the earlier houses which dictated its course.

STREETS AND ROADS

The three important arteries of Ancient Athens which bounded our area have already been named: Areopagus Street at the east, Piraeus Street at the north and Melite Street to west and southwest. We will discuss them in turn (plan, Fig. 3).

AREOPAGUS STREET

This street was the direct route from the Agora to the Pnyx and to southwest Athens. It left the Market Place near the inscribed boundary stone and ran southward beside the west end of the Middle Stoa, then past the archaic fountain house. At the southwest corner of the latter it seems to have met and crossed an east-west thoroughfare which passed beside the fountain house at the south, then behind the South Stoa, skirting the Agora at the south approximately on the line of the modern Asteroskopeon Street.²⁵ Beyond this crossing Areopagus Street bent slightly toward the southwest, running with one more slight bend further toward the southwest, for nearly two

²⁴ *Hesperia*, XVIII, 1949, pp. 275 ff.; XX, 1951, pp. 69, 72.

²⁵ See the plan, *Hesperia*, XVI, 1947, pl. XLIX; XVIII, 1949, p. 278, fig. 1.

hundred meters along the lower slopes of the Areopagus. A projecting spur of the hillside, which divides our area at the south from the old excavations of Dörpfeld,²⁶

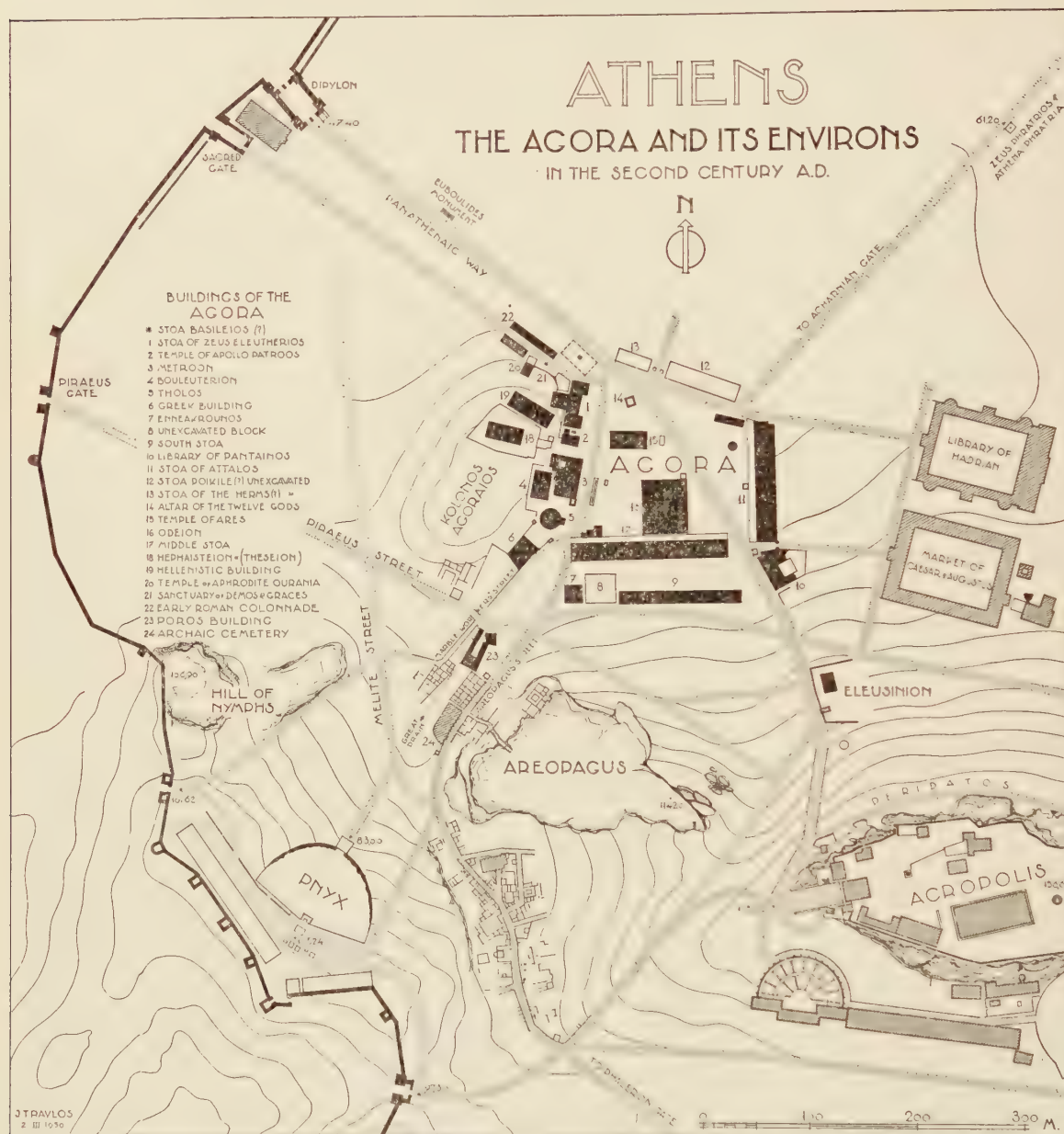


Fig. 3. Plan of Ancient Streets in the Northwestern Region of Athens.

served to deflect the street westward; the short detour which it made in order to bypass this obstacle lies under the modern Apostle Paul Street and could not be excavated.

²⁶ *Ath. Mitt.*, XIX, 1894, pl. XIV; *Ant. Denk.*, II, pl. 37; Judeich, *Topographie*², p. 290, fig. 36.

Unfortunately at this point too must lie the fork where Melite Street diverged toward the northwest from Areopagus Street, to follow the slope of the Hill of the Nymphs on the other side of the valley. To the south of this fork, which lay at the narrowest part of the gap between the two hills, the two streets became one, and their common course was traced by Dörpfeld for a long distance in the upper valley. From the fork another branch led upward to the Assembly Place of the fifth century on the Pnyx.²⁷

Evidence has been adduced elsewhere to show that Areopagus Street was probably in use from very early times.²⁸ The traffic that passed along it later, however, must have been limited to foot passengers at least in the northern section between the Market Place and the street crossing to the south, for here its course was interrupted by two short flights of steps which effectively barred the way to wheeled traffic.²⁹ The first of these lay beside the southwest corner of the Middle Stoa; three steps, put in as it seems when the Stoa was built in the second century before Christ. The second flight, of three or four steps, lay to the west of the fountain house, surmounting a slight rise to the level of the east-west street at the crossing. This flight has not yet been thoroughly investigated and at present we know neither the number of steps nor the exact date at which they were put in. The flight beside the Stoa quickly became covered with gravel and road metal and was buried in the gradually rising levels of the street. Though it was put in at a relatively late date and seems to have had a fairly short life, at least during the time of its existence across Areopagus Street, the passage of wheeled vehicles into and out of the Agora by this route was precluded. It seems fairly safe to infer that the steps would not have been built in the first place across a street which was used to carry any amount of wheeled traffic. The Agora, then, seems certainly to have been closed to such traffic by this street in late Hellenistic and early Roman times; and this certainty carries with it a strong probability that it was likewise closed in earlier periods also.

To the south of the crossing beside the fountain house Areopagus Street runs for a few meters through the area of the American excavations. This stretch was badly pitted by late disturbances and little of the road metal remained. The roadway was supported at the west by a retaining wall of which isolated stretches remain, some obviously of good period, others later patches and repairs. To the south of this area the street runs along the west edge of the Areopagus park, its course marked today by the iron enclosure fence. The foundation walls of the houses and buildings to either side are preserved over most of this stretch and they give the width of the street, which is irregular, but on the average about four meters wide, in places slightly narrower, in others wider by as much as a meter. Most of this width lies in

²⁷ For the approaches to the Assembly Place, cf. *Hesperia*, I, 1932, pp. 103, 126, 178, pl. I; XII, 1943, pl. XIV.

²⁸ *Hesperia*, XVIII, 1949, pp. 276 ff.

²⁹ *Hesperia*, XVIII, 1949, p. 213, pl. 37.

Dörpfeld's old excavation, where it has become covered over with modern fill and in places planted with trees. No cut was made across the whole width of the street, but a trial pit was sunk at its west edge where it passes the archaic cemetery. Here eight superposed layers of hard road metal were investigated; the uppermost produced sherds of the early fourth century before Christ, the lowest fragments of the sixth. No road filling of the Geometric Period was found here at bottom; but the test cut was in a very limited area at the western edge of the street. The upper levels of road filling had evidently disappeared long before excavation was undertaken, for the uppermost fourth century level was covered by a loose deposit of Turkish times. The orientation of the houses of the Roman period beside the street, however, and the absence of any walls across it which would have served to bar the passage of traffic, give adequate evidence that the thoroughfare remained in use throughout Roman times.

At the north of the Areopagus park large deep pits of late times give a good cross-section of Areopagus Street. Little digging has been done beyond the clearing out of these pits; but the cross-section they afford gives evidence adequate to show that no street drain ever existed under Areopagus Street. The rain-water apparently ran down the surface of the roadway, no doubt to be conducted at the north into one of the drains of the east-west street at the crossing. This must have been an unsatisfactory arrangement; a heavy rainstorm today demonstrates the extraordinary amount of water that rushes down from the slopes of the Areopagus, quite enough, indeed, to have undermined on more than one occasion the foundation wall of the modern fence beside the park. This flow was relieved somewhat in ancient times by a drain which ran westward from Areopagus Street, passing under an alley between the archaic cemetery and House N to the north of it, to empty into the main drain in the bottom of the valley. The alley continued up the slope to the east of Areopagus Street (see the plan, Fig. 1), and no doubt served to carry off some of the water from higher on the hillside. No other cross-streets were found and no traces of any other drains of earlier than Hellenistic times⁸⁰ to carry the water westward down the slope to the Great Drain in the bottom. The large cisterns cut in the rock of the Areopagus suggest, of course, that much of the water was collected for storage as it flowed down from the roofs of the houses, and that perhaps the residue that was left to flow down the surface of the street was not comparable to the unimpeded rush which comes down in modern times. Nevertheless, it is surprising to find no trace of a street drain, at least of Hellenistic or Roman times, beneath an important and much-frequented artery

⁸⁰ Remains were found of a drain of late Hellenistic or early Roman times running westward across the site of the Poros Building, and beside the two rooms of House P at the north. This must have carried the surface drainage of Areopagus Street to the Great Drain; but in the fifth and fourth centuries the entire area was occupied by the Poros Building, and there was no cross drain.

which skirted a hillside and was in consequence required to carry off a certain amount of water every time it rained.³¹

Areopagus Street, despite the fact that its north end from the fountain house to the Agora was closed to wheeled traffic by flights of steps, did carry such traffic over the southern part of its course, from the crossroads by the fountain house to its junction with Melite Street at the south. There is no evidence for any steps in this stretch, and the grade is gentle. Dörpfeld, too, reports the finding of wheel-ruts, apparently in this stretch of the street.³² Its width of four meters seems adequate enough for the passage singly of carts and wagons, but hardly enough for two such vehicles going in opposite directions to pass in comfort. Four meters, however, was the width of the street farther to the south, in the narrow part of the gap between the hills, and four meters was the width of the same street still farther up the valley in the region of the Amyneion and the Dionysion.³³ This, in fact, seems to have been the standard width for even the more important streets of ancient Athens; Areopagus Street, then, was about average in width and neither too narrow nor too steep to be used by wheeled traffic. No doubt it was the scene of many an irate encounter between carters trying to pass in opposite directions; better, perhaps, to imagine the members of the Athenian Democracy, preoccupied with the affairs of state (or with one or another form of the state dole) as they passed upward on foot from the Agora to the Assembly Place on the Pnyx.

PIRAEUS STREET

The position of the Piraeus Gate in the western part of the city wall to the north of the Hill of the Nymphs can be fixed within narrow limits. The direct route from Athens to its port led out through this gate, passing down to the Piraeus to the north of the Long Walls. In times of peace this must have been a very busy thoroughfare; much of the produce brought to the Piraeus by sea must have been carried up to Athens on carts and wagons over this street. On entering the city through the Piraeus Gate, which lay some four hundred meters to the west of our area, traffic could choose any one of three directions: toward the northeast and the region of the Dipylon; to the southeast and south by Melite Street; or straight east, past the Agora, to the region at the northern foot of the Acropolis. We should expect, then, to find an important artery running eastward from the Piraeus Gate and passing through our area, for

³¹ Dörpfeld in his excavation to the west of the Areopagus found a drain of tiles, evidently of Hellenistic or Roman times, beneath the street outside the limits of our area to the south (*Ath. Mitt.*, XVII, 1892, p. 91; Judeich, *Topographie*², p. 179). This lay, actually, south of the junction of Areopagus and Melite Streets; the northward continuation of this drain may have emptied into the Great Drain, or continued to run under Melite Street.

³² *Ant. Denk.*, II, p. 2.

³³ Cf. the plan, *Ant. Denk.*, II, pl. 37; and Judeich, *Topographie*², p. 179.

there was no route across the Agora from east to west, and at the south the Areopagus offers an effective barrier. The street leading westward to the Piraeus Gate has been designated Piraeus Street; its existence and approximate position have long been known or suspected.⁸⁴

This street can now be traced all along the northern boundary of our area. Most of its extent has been cleared only to the later Roman levels, but its line is attested not only by the lay of the houses to either hand, but also by the recurring appearance of hard patches of road metal throughout its extent. At the crucial point where it met and crossed the south branch of the Great Drain and the Street of the Marble Workers, however, it has been more exhaustively examined. The name Piraeus Street should perhaps be limited to the stretch from this crossing westward to the Piraeus Gate, for to the east of the bridge or of its intersection with Areopagus Street the east-west road seems to have forked, one branch skirting the northern slopes of the Areopagus to join the Panathenaic Way somewhat above the Eleusinion, the other passing straight to the south of the Market Place beside the fountain house and behind the South Stoa. It has been suggested elsewhere that the southern or right fork of this street must go back to very early, perhaps to Mycenaean and certainly to Geometric times.⁸⁵ This was the main route from the western gate of the city to the Acropolis and to the public buildings and sanctuaries situated on its upper northern slope. The northern or left branch of the street has not yet been excavated; it lies beneath the modern Asteroskopeion Street which is still in use; but its existence is hinted by the presence of layers of ancient road metal under the modern street in the scarp at the south of the fountain house, by the situation and orientation of the South Stoa at the southern edge of the later Agora, and by the provision made for the entrance of its street drain into the south branch of the Great Drain under the bridge at the crossing. This street must have led directly to the region of the Roman Agora and thence to the northeastern parts of the city.

Piraeus Street, running westward as it did to the Piraeus Gate, met and crossed three north to south routes in the immediate vicinity of our area: at the east, Areopagus Street which connected the Agora with the Pnyx; in the central part of the area by the bridge over the Great Drain, the Street of the Marble Workers, connecting the region of workshops at the south with the Agora; and at the west, probably somewhere under the present Theseion square, Melite Street which connected south-western Athens with the Dipylon, passing to the west of the Hephaisteion. This was a busy section of Athens; the amount of traffic that passed along Piraeus Street is attested by the deep wheel-ruts worn in the surface of the roadway and in the paving

⁸⁴ On the Piraeus Gate, see Judeich, *Topographie*², pp. 139 f.; a section of the street leading to it is shown on Dörpfeld's plan, *Ant. Denk.*, II, pl. 37, labelled *zum Piraeus Thor*.

⁸⁵ See the plan, *Hesperia*, XVII, 1948, p. 154, fig. 2, which shows the Mycenaean tombs found near the Agora up to 1947; also *Hesperia*, XVIII, 1949, pp. 277 ff., fig. 1.

slabs of the bridge where it crossed the drain. The width of the street at the bridge, 8.60 m., is more than twice that of Areopagus Street or of the street passing beside the Dionysion; but it is likely that in this area of much-frequented street intersections the Piraeus Street may have had more than its normal width. It may, in fact, have become a wide avenue for a short distance from Melite Street to Areopagus Street, perhaps the *σύμβολον* referred to by Plutarch.⁸⁶ The vicinity of Kolonos Agoraios, probably somewhat to the west of our area, was frequented by workers waiting to be hired, known as *κολωνέται* because of their place of waiting.⁸⁷ Their stand was well chosen, probably near the busy intersection of Piraeus and Melite Streets.

The width of the street is given by that of the bridge which carried it over the Great Drain. At the crossing the drain bends slightly from the line it has followed farther to the south, in order to meet the line of the cross-street at a right angle, and also to attain the line of the Street of the Marble Workers, which it follows northward from the bridge. Since this bridge is an integral part of the street as well as of the drain, it is best to describe it here. The south branch of the Great Drain was put in, as we shall see below, at the beginning of the fourth century. At the point where it was crossed by Piraeus Street provision had to be made for a bridge to carry over the traffic, and a specially constructed roofed section of drain 8.60 m. long, the width of Piraeus Street, was made. The bridge thus formed is straight; at either end, both to north and to south, there is a slight bend in the course of the drain. It would thus seem that the bridge took its orientation from that of Piraeus Street, which, of course, existed before the drain was built. The west wall of the bridge, dating from early in the fourth century, is almost intact (Pl. 56a); the east wall is partly original, at the north, and partly repaired or rebuilt.

The bridge was made in corbelled construction of squared blocks of conglomerate and poros (section, Fig. 4C). The first of these materials was used at the bottom for a bedding course, no doubt because it was considered more resistant to the action of water, and the faces of the blocks were left rough. The width from side to side between these bedding courses was 1.40 m. The second course is of large squared blocks of conglomerate rather carefully fitted and presenting a vertical face to the inside of the drain, a sort of levelling course. Above, the construction is of poros, three courses high, so corbelled that each course projects into the drain beyond the face of the course below. The inner faces of the blocks were cut to a curve, but in places a narrow projecting ledge was left between courses. By means of this corbelled construction the width of the gap to be spanned by cover slabs was reduced from

⁸⁶ Plutarch, *Moralia, de genio Socratis*, X; cf. also Judeich, *Topographie*², p. 178, who places it in the northwestern part of Athens. It should certainly have been near the street of the Herm-Makers, according to the account of Plutarch. The modern Greek term for the meeting place of several streets or roads is *συμβολή*; the term is a general one, as it may also have been in antiquity.

⁸⁷ Harpokration, *Lexicon s.v. κολωνέται*.

1.40 m. to about 0.80 m.; exact measurements could not be obtained at the top because the action of water had eaten away the points of the soft poros blocks. The depth of the drain at the bridge was 2.40 m. from the under side of the cover slabs to bottom. The drain walls go to a thickness of 1.25 m.; much of the poros was reused, the upper faces of the top wall blocks on the west side and those of their backers showing clamp cuttings from a previous use (Pl. 57b).

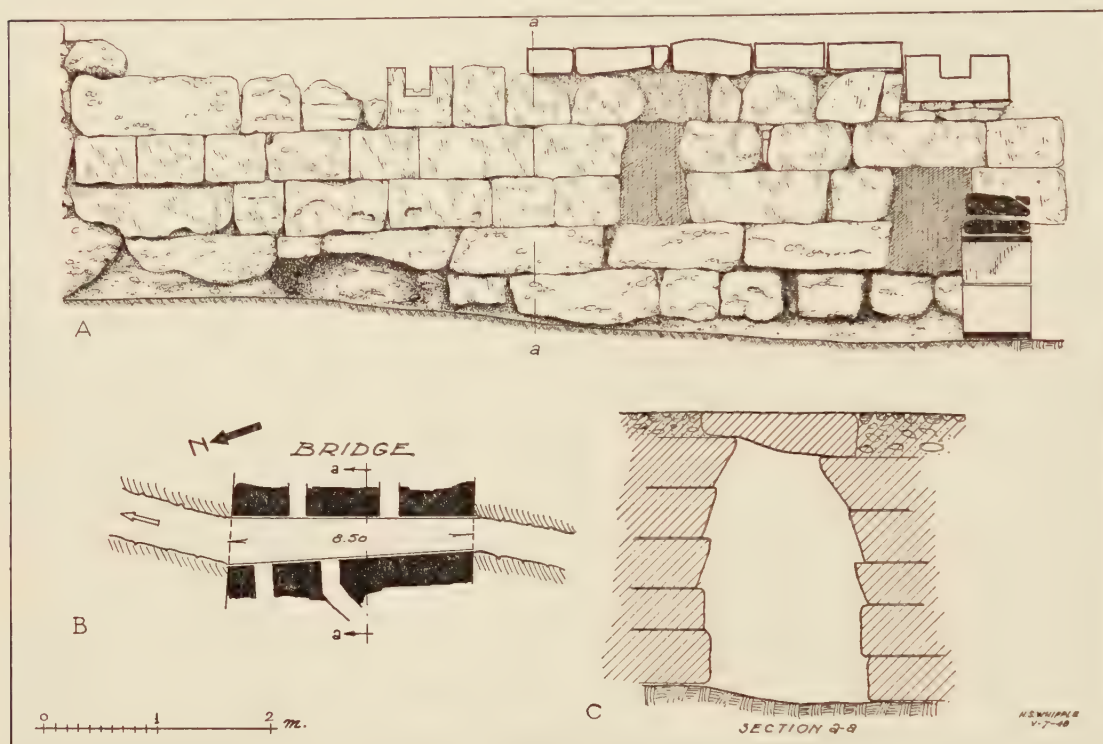


Fig. 4. Bridge over Great Drain at Piraeus Street. A—West Wall of Drain, Elevation. B—Plan of Side Drains. C—East-West Section at a-a, Looking North.

The bridge was attributed to the early fourth century as a part of the first construction of the drain; when the street filling behind its west wall was tested, confirmation of this dating was obtained. The uppermost layer of road metal which had definitely been cut through by the builders of the west drain wall contained sherds of the last quarter of the fifth century, among them a small fragment of a stamped black-glazed cup or bowl. The three layers above this, however, showed a deep crack near their edge and running parallel to the cutting made for the drain wall; no doubt these layers were also in existence when the street was cut through, and their surface cracked near the edge of the scarp, though the fill at the edge did not fall. These three

layers produced nothing later than did the one below them; but they suggest that the cut made through the street for the drain was slightly later than the date indicated by the sherds from the lowest layer; perhaps it was made at the beginning of the fourth century.

A parallel for corbelled construction in the early fourth century may be cited at the Kerameikos. Just to the north of the Sacred Gate, at the point where the Eridanos debouches through the city wall, the river bed was spanned by an arch made from blocks of hard limestone laid, like ours, in corbelled construction and finished on its inner face to a continuous arching curve (Pl. 56b).³⁸ The foundations for this arch are not to be separated from those of a tower of the second period of the Sacred Gate, which is usually dated early in the fourth century and attributed to the rebuilding of the walls by Conon. A later extension of the arch corbelled over the Eridanos was made toward north and south with voussoirs or wedge-shaped blocks; it probably dates from Hellenistic times. Our street bridge is so similar in construction and so close in date to the corbelled roof over the Eridanos that the two may well have been made by the same engineer or contractor.

In the building of the bridge over the Great Drain provision was made for the entry of side drains which ran under the streets. Four rectangular openings were left in the side walls of the drain when it was constructed, two at the west side and two at the east (plan, Fig. 4B). The southern of the two openings in the west wall, at the left in the elevation, Fig. 4A, brought in the waters of the drain under the Street of the Marble Workers. It passes over the levelling-course of conglomerate, in a gap 0.65 m. wide and 0.90 m. high, the height of the two lower corbel courses of poros. At this point the wall of the drain is thicker than elsewhere. Because the line of the Great Drain diverges toward the south from that of the Street of the Marble Workers, the street drain of the latter comes in at an acute angle to the main drain. To avoid this angle at its entrance, the side drain is turned at its north end and made to enter at right angles; and the wall of the Great Drain is carried back toward the west far enough to turn it (Fig. 4B). We could examine this junction only from the inside and for that reason all the details of construction were not obtainable. The cover slabs over the north end of the side drain before it starts to turn to join the Great Drain follow the orientation of the cover slabs of the latter.

The second opening in the west wall of the Great Drain (Fig. 4A-B) was left to allow passage for the street drain under Piraeus Street, coming in directly from the west. The opening lies near the north end of the bridge and one course lower than the opening to the south, entering over the bedding course and passing through the conglomerate levelling course and the first poros course above. The gap is 0.70 m. wide and 0.90 m. high. At the outer (west) end of the drain blocks appears the end

³⁸ See Noack in *Ath. Mitt.*, XXXII, 1907, pp. 477 ff., fig. 17, pl. XI, L-L₁. Cf. also Judeich, *Topographie*², pp. 137, 139, fig. 10.

of the Piraeus Street drain, a half-elliptical channel of tiles measuring 0.36 m. wide and 0.45 m. high on the inside. Only the upper covering course of half elliptical tiles was used; the lower or channel course is lacking at the inlet into the main drain, though under the street at the west the full ellipse was used. No doubt this tile drain dates from Roman times; it was probably laid in the years after Sulla and repaired many times thereafter. Its course can be traced beneath Piraeus Street as far to the west as we have dug.

Two similar openings in the east wall of the bridge call for two side drains to enter through them. The southern of these openings brought in the street drain of the southern branch of Piraeus Street, which ran along the northern slope of the Areopagus. This drain has been traced under the street for some distance toward the east. The bridge wall where it entered has been entirely rebuilt, partly with original and partly with added material. The level of its entrance is over the lowest or bedding course; the width of the gap as rebuilt is 0.60 m., and its height 1.00 m., *i. e.*, two courses.

The presence of a second opening for the entrance of a street drain through the bridge wall near its north end implies the existence of a second street. We have suggested above (p. 150) that evidence exists in addition to the presence of this opening for a second eastward branch of Piraeus Street which passed the Agora behind the South Stoa. This street must have had its own drain, which would empty into the Great Drain somewhat to the north of the one under the other branch of Piraeus Street. In the opening near the north end of the east wall of the bridge appears the beginning of a fully elliptical tile drain with both channel and cover tiles, not, as in the Piraeus Street drain at the west, only the upper covering half. These tiles have an inside height of 0.84 m. and an inside width of 0.43 m. They begin at the outer face of the drain wall, 1.25 m. in from the main channel and they appear to come from the southeast. It seems entirely probable that various alterations were made in the drainage system under Piraeus Street to the east of the bridge in Hellenistic and Roman times; the drain of the northern branch of Piraeus Street was perhaps diverted into that of the southern and the two ran as one for a certain space before forking again to enter the Great Drain through two separate inlets. The area east of the bridge has not yet been sufficiently excavated, however, to clarify exactly what occurred in the rather complicated history of these drains. The opening left for the northern street drain is three courses in height, 1.40 m. from the bottom of the drain through the bedding, levelling, and first poros courses, and 0.55 m. in width. Whatever may have happened in later times to the side drains at the east, the presence of this large gap, left by intention in the east wall of the Great Drain when it was built in the fourth century, is sufficient evidence that at that time there were two street drains coming from the east which required separate outlets into the main drain.

The entire west wall and the northern half of the east wall of the bridge are

original construction intact, except at the top. Of the original covers none remains. The southern half of the bridge, a stretch of four meters, was stripped of its covers in Byzantine times; over the northern half six cover slabs were found in place, though none of these belongs to the fourth century bridge. The layers of road metal immediately overlying these blocks, which were at the same time cover slabs over the drain and paving stones in Piraeus Street, produced sherds as late as the first century before Christ. Most characteristic were many small bits of the ware called Pergamene.³⁹ The deep ruts worn by wheels in the upper faces of these blocks imply the passage of traffic for some time before the first protective layer of gravel accumulated (Pl. 56d). The covers are of various materials: one block of conglomerate, two of marble and three of poros. The relatively soft poros was much more easily worn and the deepest rut appears in the surface of one of the slabs of this material. The conglomerate block, which is the southernmost, shows wheel ruts in its under face—evidently it was turned over after previous use at the bridge before being put in its present position. The variety of material suggests a repair or reconstruction; and in fact the covers are all reused material. The west ends of only two of the slabs rest on the topmost course of poros corbelling; the west ends of the others and the east ends of all, rest on small stone packing put in at a later date to level off, the tops of both walls having evidently suffered damage. One of the covers is a marble grave stele with a small sculptured relief leaded into its face, now turned downward and badly worn by the flow of water in the drain. The east end of another cover is supported on a second marble grave stele adorned on its narrower sides with carved rosettes. These reused grave monuments were probably brought from the neighborhood of the Dipylon. We know that in 86 B.C. Sulla's army forced its way into Athens between the Dipylon and Piraeus Gates;⁴⁰ a great deal of damage was done in that quarter and no doubt the devastated area soon became a source of building material. Stones from this source were used freely in the bridge and its vicinity. An inscribed grave stele bearing the names of ten persons all of one family (Pl. 56c, d), was used, as we shall see, just to the west of the bridge, probably to support the side of a water channel. Another grave relief, its carved face carefully chiselled down, was used as a cover over the drain which ran beneath the Street of the Marble Workers. Two large slabs of marble, each with a shallow round cutting in its upper face, bedding stones for columnar grave monuments of Hellenistic times, were found, one embedded in the road metal of Piraeus Street, where it may have been used as a cover over the terracotta street drain (Pls. 56d, 58d) and the other spanning the Great Drain to the south of the bridge, where it served to carry across the north wall of a house of Roman times. The hypothesis that all this material was made available for reuse through the devastation wrought by Sulla's army in and near the Dipylon cemetery accords very

³⁹ *Hesperia*, II, 1933, pp. 285 ff.; III, 1934, pp. 471 ff.

⁴⁰ Cf. Judeich, *Topographie*², pp. 95 ff.

well with the date for the repaving of the bridge suggested by the sherds from the layers over it: some time in the first century, probably before the reign of Augustus.

The northernmost cover slab over the drain, belonging to this rebuilding, is a block of poros with a water channel cut in its upper face. The channel is rectangular in section, 0.25 m. wide and 0.21 m. deep (Pl. 56c, d). The poros block is itself 0.45 m. thick, much thicker than any of the other cover slabs. Allowance was made for this thickness when the block was laid by taking out the topmost poros corbels and rebuilding a bedding of small stones to about half the height of the top course of the drain wall. The top of the channel block, set on this lower bedding, did not reach as high as the tops of the other slabs over the bridge (Fig. 4A). This was done intentionally because the channel block carried fresh water across the drain and allowance had to be made for the thickness of the covers over the stream which ran in the channel beneath the street surface. Provision was made for the continuation of this water-channel toward the west, perhaps in a terracotta conduit. At the west end of the channel block a packing of small stones evidently served as a bedding and an inscribed marble grave stele, mentioned above, served as a support along the north side of the continuation (Pl. 56c, d). What form the continuation of the channel so supported and so bedded took, we are unable to say because it had entirely disappeared.

The use, to span the drain, of a block with a channel cut in its upper face, and the careful adjustment of its level, make it evident that fresh water was carried across the bridge and beneath the street. The direction of flow was from east to west. The source, then, lay somewhere to the east; where we cannot yet say, except that the levels are too high for water to have been brought across the bridge from the fountain house at the corner of Areopagus Street. Rather the source must have been well up on the slope of Areopagus or Acropolis; the Klepsydra suggests itself as the only possible place of origin. In late Roman times water from Klepsydra was evidently stored and let out from time to time to turn a water mill at the east of the Agora;⁴¹ possibly the water of Klepsydra was similarly impounded in much earlier times and allowed to flow out on occasion alternately by a number of channels in various directions to supply several areas of northern and northwestern Athens.⁴²

The channel block still in place across the drain was placed there in post-Sullan times; but it was only one of a series of successive channels which carried fresh water westward under Piraeus Street, and all of them had to cross the Great Drain. Another

⁴¹ *Hesperia*, V, 1936, p. 89. The rather vague conclusion there offered as to a source of water for the mill now becomes more specific, since later digging has disclosed a great cistern on the northern slope of the Acropolis, built in later Roman times to store water overflowing from the Klepsydra; cf. *Hesperia*, XII, 1943, p. 249.

⁴² The irrigation of gardens around Athens in modern times, e. g. at Amaroussi, is done by letting the water from a single source flow in turn into a series of channels leading in various directions, according to a fixed schedule. "Water day" is something of an event to the local gardeners.

channel block is still in place in the west wall of the bridge, to the south of the existing covers. The block is set into the topmost course of the drain wall, but evidently not as a part of the original construction because it does not fit the gap through which it passes (Pl. 57a, c, d and Fig. 6A); the gap is wider than the block and the superfluous space is filled with a packing of broken poros. At this level the watercourse in the channel would have been covered by the regular cover series of the bridge itself. A footing trench for the channel slab could be traced along its south side (Pl. 57d); the sherds from it were Hellenistic, possibly as late as the second century before Christ. This channel, then, dates from Hellenistic times and was the predecessor of the post-Sullan channel at the north. It went out of use at the time of the later repair or before; there is no trace of any continuation toward the west, except for a packing of small stones along the north side which are still in situ for a distance of about 0.40 m. where its successor toward the west had lain. The area to the west was occupied by the drain under the Street of the Marble Workers, here repaired in the first century at about the time of the repaving of the bridge. In this repair all traces of the westward continuation of the channel were obliterated. The older channel, then, was made at some time in the Hellenistic period and probably damaged at the time of Sulla's siege; it was replaced in the general first century rebuilding.

The channel block is broken off at its east end (elevation, Fig. 4A; Pl. 57a, c), but the break comes so close to the inner face of the drain wall that not enough space remains to bed the end of another block lying to the east, and we must conclude that the block still in place originally extended across to the east side of the drain. Since its preserved length is 1.82 m. and a nearly equal length is required to carry it across the gap and to bed its east end securely on the opposite drain wall, the block must have been a sizeable one, about 3.50 m. in length. The channel in its upper face is 0.24 m. wide and 0.23 m. deep; in its bottom coarse mortar preserves the impression of a round pipe with an outer diameter of nine centimeters. The pipe suggests that drinkable water was brought across the bridge in the channel.

Yet a third channel block which extends across the bridge was the latest in the series. It crosses the bridge near its north end (Pls. 56c, d; 57a, 58a) where it rests on a filling of gravel and road metal which overlies the paving of the bridge to a depth of about half a meter. The channel of which this block forms a part is continued toward the east by another channel block, also of poros. At the west a hole made very late in Roman times separates the block from another at the same level; the hole between the two blocks was used to carry a small terracotta drain down at a steep angle from the west to empty into the drain of Piraeus Street. At the time when this tile drain was put in, the western channel block had obviously ceased to serve its original function, which was to carry clean water from east to west, and had been reused to carry dirty water in the opposite direction. Both the western block and the

long block over the drain have settled because they rest on relatively soft fill, and the direction of flow is no longer determinable; but their place in a long series of channels conveying water from east to west makes it a practical certainty that the flow was from east to west. The long channel block was evidently laid at some time after the Herulian sack of Athens. The level at which it lies demands this; the filling which had been cut through for its bedding produced sherds as late as the third century after Christ; and all the filling along its south face was as late as the end of the fourth or the beginning of the fifth century.

The block is of hard greyish poros carefully cut, its surface tooled. Along its north face it is divided by horizontal drafting into two plane faces, the lower recessed. Two pairs of small square holes, 1.60 m. apart, in the case of each pair one above the other, appear in the same face (Pl. 58a). The south face is plain. The bottom face is well finished, and shows two sets of three small square holes to correspond to the two pairs of holes in the north face, and at the same distances from the ends of the block. The channel in its upper face is 0.27 m. wide and 0.21 m. deep. The end of the block is carefully finished, perhaps as a resting surface. The block measures 3.98 m. in length, 0.65 m. in width, and 0.40 m. in thickness. Along the entire length of the upper edge at the north side the surface is very worn, as by feet passing over it. The cuttings in the under side of this channel block prove definitely that it is reused in its present position; perhaps it originally formed part of a building destroyed at the time of the Herulian sack in A.D. 267.⁴³

The laying of elliptical terracotta conduits in the course of the Great Drain in late Hellenistic or early Roman times—two conduits to the north of the bridge, one to the south—made it possible to fill in what had been formerly a wide uncovered channel; the terracotta tiles were strong enough to bear the weight of the superincumbent fill. Thus it was possible to fill in the drain to the north of Piraeus Street and to carry the Street of the Marble Workers over the course of the formerly open channel, perhaps surmounting the change in level between Piraeus Street and the Street of the Marble Workers to the north with a gradually rising ramp. The wear on the north side of the second cover block still in place at its upper edge (the first cover, it will be remembered, was the channel block of Augustan times, which once had covers of its own over the channel and therefore was not itself exposed to wear) is very even along the whole edge, suggesting that traffic from north to south had passed over it, coming from the Agora by the Street of the Marble Workers and passing up to Piraeus Street

⁴³ I am grateful to John Travlos for making an investigation of the under side of this block after my departure from Athens. He reports that he cannot positively identify the original use for which it was made. Homer Thompson suggests that it may have been a door-jamb. The cutting of the water channel in its present upper face for its latest use has of course obliterated any evidence as to its original purpose which may have been afforded on the fourth side. The very heavy wear along its north edge indicates that it lay exposed in the surface of the street for a very long time.

at the centre of the bridge at its north side. In the making of the ramp the north end of the drain under the bridge would have had to be closed in order to hold back the earth of the ramp and retain it from spilling into the space under the bridge. The terracotta drain tiles begin just inside the bridge at its north end; a wall of small stones 0.50 m. thick was built over them and its lower course is preserved (Pl. 56c, 58a; Fig. 4A). Though a wall of this thickness seems hardly adequate to hold back the earth of the ramp, this bedding of small stones is all the evidence we have to show that the drain was closed off at the north end of the bridge after the ramp was made.

From the third to the fifth centuries water was carried in two successive lines of tile channels which crossed the bridge on the cover slabs. The earlier channel was made of rectangular terracotta tiles 0.645 m. long and with inside depth of 0.24 m. and width of 0.24 m. The joins between these tiles were carefully sealed with hard white mortar to prevent leakage; the tiles must have had flat covers. Little of this line remains; it was later replaced by a line of elliptical drain tiles which followed the same course. The full ellipse of this channel was made up of a lower line of channel tiles and an upper line of cover tiles, carefully packed at the sides and with all the joints sealed by a coarse pink mortar (Pl. 58c). To the southern edge of the last cover slab of the bridge still in place at the south still adhere bits of the hard white mortar of the first, and the coarse pink mortar of the second terracotta channel. The tile channels evidently crossed the bridge on the next cover slab toward the south, now missing, but which must still have been in place after the Herulian sack. In the packing beside the later tile channel was found a lamp of Broneer's Type XXVIII,⁴⁴ but an early example of the type, dating probably from the second half of the third century. We may therefore ascribe the later of the two water-channels to a post-Herulian reconstruction of the water system; the period of service of the two conduits falls between that of the post-Sullan repair and the late channel which included the long reused block.

At the east side of the bridge these channels appear (Pls. 57a, 58d) as two ellipses side by side, the end of the earlier southern one carefully blocked by a stone wall built into it; it evidently changed in form from elliptical to rectangular somewhere on the bridge. The direction of the flow of both tile water-channels is from east to west. The later channel can be traced under Piraeus Street as far to the west as we have dug; at one point in this stretch it passes under the tiled street drain, which flows in the opposite direction, west to east, to empty into the Great Drain under the bridge.⁴⁵

⁴⁴ *Corinth IV, ii, Terracotta Lamps*, pp. 102 ff.; cf. no. 1405, pl. XIII.

⁴⁵ The later of these tile channels seems certainly to have been reused to carry off the drainage from the large late Roman bath which occupied the area to the east of the Poros Building, at the corner of Piraeus and Areopagus Streets. Side drains enter it at various points along its course. But the care with which the tiles were laid and sealed with mortar at the joints to prevent leakage, together with the clear indications that the channels were carried over the Great Drain on the

At the time when these tile water-channels were laid the level of Piraeus Street had risen the better part of a meter through the accumulation of layers of gravel and road metal. We dug through seven layers of hard road metal overlying the post-Sullan layer at the level of the bridge. All of these, which ran through the first and second centuries after Christ, showed evidence of recurrent road repairs: potholes and wheel ruts had been patched with new fill, which in time became packed down to a surface as hard as that of the rest of the street. The post-Sullan road surface which was left (Pl. 58d), shows a definite slope from east to west at the west end of the bridge. Piraeus Street, if the channels for fresh water under its surface continued to the west of the point to which we dug, must have passed through a saddle between the Hill of the Nymphs and the Kolonos Agoraios much deeper than the level of the modern square to the south of the Hephaisteion would suggest, else the flow of water would have been stopped by rising ground.

The great width of the street at the west of the bridge seems to have remained fixed until Roman times. At the northwest corner a house of early Roman times seems to have encroached to a distance of 1.80 m. over the north edge of the street. At the south the line of the street seems to have remained constant from Greek times to the Herulian destruction. The line of the north walls of the houses succeeding one another from Greek to Roman times between the Great Drain and the Street of the Marble Workers remained constant, which suggests that the bridge itself retained its full width equally long. At the southwest corner of Piraeus Street and the Street of the Marble Workers, the houses of both periods extended somewhat farther toward the north (plan, Fig. 5) than at the southeast corner, but their line remained constant. In post-Herulian times the houses gradually encroached a distance of 1.50 to 2.00 m. over the street from the south; its width was reduced to little more than four meters. The same phenomenon is to be observed to the east of the bridge, though the encroachment of houses into the street from the south started earlier than at the west; and the line of the street was thereby gradually shifted northward. But by these late times Athens had become a far less populous center than formerly, and no doubt there was far less traffic carrying up produce from the port over the dwindling Piraeus Street.

THE STREET OF THE MARBLE WORKERS

Mention has already been made on several occasions of this street. It has been called the Street of the Marble Workers because of abundant evidence of the working of marble during the fifth and fourth centuries before Christ in the houses or workshops bordering it at either side. It ran southwestward from the Agora, diverging

bridge at a time when the Great Drain was still functioning, seem to be sufficient proof that these channels were originally intended to carry fresh water. The laying of the latest conduit of poros blocks of course freed the tile channels for reuse as drains.

from Areopagus Street to the west of the Middle Stoa and following the line of the Great Drain as far as the bridge at Piraeus Street. To the south of the bridge the line of the Great Drain diverged from that of the street, which continued in a straight line toward the southwest up the bottom of the valley (Pl. 57c; Fig. 1). Some fifty meters to the south of the bridge lay a small open square or plateia, 7.60 m. in width, between the street and the Great Drain; through this plateia access was to be had from the street to the south end of the Poros Building which lay to the east of the drain. Here too, until the building of the south branch of the Great Drain, the street seems to have forked into two branches, the one continuing up the valley on the line taken by the drain, the other curving westward to mount the slope of the Hill of the Nymphs in the direction of the gate in the city wall in the saddle between the Pnyx and the Hill of the Nymphs.

The street evidently goes back to very early times. It is not unlikely that the east end of the dromos of the Mycenaean chamber tomb (plan, Fig. 1) opened from a street which passed up the valley when the tomb was made. No traces were found of a road as early as this; but in Geometric times a road undoubtedly followed the winding course of the stream bed in the valley. Grave A probably lay beside this road;⁴⁶ and under the open square at the diversion of the two later streets a heavy deposit of gravel and road metal of Geometric times was found, in one place completely covering a short stretch of crude wall which may have been part of a parapet beside the early thoroughfare (plan, Fig. 1). The road of Geometric times seems to have passed to the south under Houses B-D.

The left branch of the later street southward of the square ran somewhat to the east of its Geometric predecessor. It may once have continued up the valley to meet Melite Street north of its junction with Areopagus Street; but about the middle of the fifth century through-passage was blocked by the building of House A. Thereafter this branch of the road became merely a passage giving access to the houses beside it, A-B and J-M. Its width of between four and five meters is given by the walls of the houses which bordered it to east and west before the drain was built. The open space between them was left primarily as a passage for the drainage, though no doubt it was also a convenient way of approach to the houses. The Great Drain in its first form seems to have been merely an open ditch dug in the bedrock, but the ditch was not wide enough to fill the whole of the space between the houses and passage ways were left along either side. All evidence for the date and arrangement of this street was obliterated when the Great Drain was put in, and we found no traces of its filling or road metal. It replaced the street of Geometric times which lay somewhat to the west; it was apparently the line of natural drainage from post-Persian times onward, and the houses beside it took their orientation from it. We found no evidence to show

⁴⁶ Cf. also *Hesperia*, XVIII, 1949, pp. 275-276. For Grave A, *Hesperia*, XX, 1951, pp. 69, 72.

that it had been in use in the sixth century, though it probably was. With the building of the south branch of the Great Drain early in the fourth century this street must have gone out of use; in two places, between the Poros Building and House E and between Houses D and K (plan, Fig. 5), the drain narrows to bottlenecks only seventy centimeters wide between the inner faces of its walls—too narrow to pass in comfort.

The westward branch of the Street of the Marble Workers continued in use from archaic through late Roman times. A cut made in its filling at the bend in its course revealed six successive layers of road metal, of which the uppermost produced fourth century B.C. sherds, the lowest sherds of the late sixth or early fifth century. Beneath lay a layer of soft red earth which evidently predated the use of this area as a street and which contained sherds of the sixth century. This branch of the street, then, seems to have come into use early in the fifth century. Perhaps it led from the Agora to a gate in the early city wall on the crest of the Pnyx ridge.⁴⁷ In any case this branch seems to have displaced the other even before the other was replaced by the Great Drain; otherwise it is hardly likely that the builder of House A would have been permitted to block a thoroughfare for which there was no alternative route.

Over long stretches of the extent of the street the road metal is intact at either side, cut through down the middle by a trench in which a street drain was laid in early Roman times. Unfortunately the line of this drain continued as the line of natural drainage from the slopes of the Hill of the Nymphs into very late times. Masses of coarse gravel washed down from the west and deposited by water were found all along it, in places going into deep pockets. Some of the coins from this deposit were as late as the eleventh and twelfth centuries of our era. Nearly the entire length of the west to east slope of the drain was occupied by this filling; at its west end the drain disappears into a tunnel cut in the rock of the hillside. Wherever the packing beside the tiles of the drain itself is preserved it suggests an Augustan or first century B.C. date for its laying: a favorite packing material was the amphora of heavy fabric, often with a Latin stamp on its rim, usually dated about the turn of the era. The east to west stretch of the drain was made with an elliptical tile conduit, which extended as far as the bend in the line of the street. Beyond that for a certain distance a late repair had been made of curved tiles stood on edge and tangent at the top over the

⁴⁷ No trace of a wall as early even as Kleon's "diatichisma" was found on the ridge during the excavations on the Pnyx; cf. *Hesperia*, XII, 1943, pp. 301 ff. The Themistoclean walls passed well to the west of the ridge, including the district of Koile within their circuit. No doubt this gate was left in the "crosswall" when it was built in the fourth century because the road which passed through it already existed, but perhaps also because it was the site of a gate in the hypothetical earliest wall attributed to Peisistratos or his sons, *Hesperia*, XX, 1951, p. 133.

On the question of the pre-Themistoclean wall cf. now also O. Walter, "Zur Frage der vorthemistokleischen Stadtbefestigung Athens," *Anzeiger der phil-hist. Klasse der Österreichischen Akademie der Wissenschaften*, Jahrgang 1922, pp. 518-527. Walter argues for the existence of a pre-Persian circuit wall but does not venture to decide between Hippias and Kleisthenes as author.

center, forming a pointed arch. Farther to the north the drain is made with elliptical tiles or with roughly built side walls covered by flat stone slabs. As the levels of the street rose with time the flat cover slabs were in places taken out and half-elliptical tiles substituted for them; these were late repairs, but the junctions where the two types of cover met and where the tiles stood to almost their full height above the slabs no doubt provided convenient manholes for the cleaning of the drain beneath.

In most places the strips of road metal to each side of this channel date from the fifth or fourth centuries before Christ; apparently the upper levels of the road filling were dug away in very late Roman or in Byzantine times. That the street brought down a quantity of water in the fifth century B.C. is apparent from the provision made for its reception into the Great Drain through an opening left in its west wall under the bridge when it was built. The drain of Roman times has, however, obliterated the remains of any earlier street drain that may have existed. In two places, to the east of House G and to the east of the unnamed house at the intersection with Piraeus Street, there remain short stretches of light walls—the southern 0.30 m., the northern 0.16 m. thick—set into the surface of the street. These walls are too light to have served as foundations; their upper faces are worn by the passage of feet over them, their vertical faces toward the middle of the street are worn by water. Usually they do not follow the line of the street but run obliquely into it, starting close in near the house walls at the south and gradually encroaching farther into the street toward the north. The slope is from south to north; these low bits of light wall were evidently set into the street in front of the houses in order to turn away water flowing down the surface of the roadway and to prevent it from undermining the foundations. They formed, then, the west side of a sort of gutter or shallow channel in the middle of the street; its width could not be determined because no corresponding gutter walls were found at the east—they had probably been cut away when the street drain of Roman times was laid. Further, the gutters seem not to have been continuous, else they would have followed the line of the street; rather they seem to have been put in by sections in front of each house that lay beside the street. They date from the fourth century and their presence in the surface of the street argues against the existence of a street drain beneath it at that time. Somewhere at the crossroads, however, there must have been an opening of some sort to carry down the water running over the surface of the roadway into the opening left for its passage in the west wall of the main drain.

The Street of the Marble Workers had a normal width of approximately four meters throughout most of its extent. It widened somewhat before the bend in its course from southwest to west. Here it passed House D at the east, the house opening from the street at a short jog in its line (plan, Fig. 5). At the corner formed by Houses C and D the south side of the street turned west at a right angle, passing the door of House C at the south. The north and west sides of the street were bor-

dered by a curving parapet or retaining wall of large squared conglomerate blocks put in somewhat later than the houses opposite, in the third century.

At the north, however, as it neared its intersection with Piraeus Street, the Street of the Marble Workers gradually narrowed. At the north end its width was only about 2.80 m., and this width seems to have been constant, the walls of the houses to either side following the same line from Greek to late Roman times. A deep groove at the east side of the Street of the Marble Workers at the opening into Piraeus Street is perhaps a wheel rut; its line is curved as though made by traffic turning eastward into Piraeus Street as it came from the south, and it passes as close as possible to the foundation stone of the house at the southeast corner of the intersection.

It is significant that this wheel rut, if such it is, turns eastward instead of going straight across Piraeus Street. In the latter were found many traces of wheel ruts, but all running east-west, none north-south on the line of the Street of the Marble Workers. This indicates a lack of cross traffic; and there was none, because the Street of the Marble Workers, like Areopagus Street farther to the east, was closed by a flight of steps or a ramp which prevented wheeled traffic from continuing northward toward the Agora from Piraeus Street. Unfortunately few traces of this arrangement remain because of a very deep disturbance of Byzantine times just to the north of the bridge. The difference in level between the fifth century surface of the north-south street to the north of the bridge, and the fifth century surface of Piraeus Street to the west of the bridge, is nearly a meter; there must always have been a rise at the line of Piraeus Street and the building of the bridge at the beginning of the fourth century does not seem to have greatly increased it. But except for a few blocks with extremely worn surfaces which may once have served as steps in a flight and which were later built into house walls, nothing remains of a stair. An indication is given by the foundations of the house which stood at the northwest corner of the intersection in the fifth and fourth centuries. The east wall of this house, which dates from the fifth century, bordered on the north-south street. At some time in the fourth century an addition was made and the house was extended by about two meters toward the south. An extension of the east wall of the house was made toward the south, and a new corner; and the extension was not bedded as deep as the fifth century street level at the east. We know from farther to the north that the surface of the street in the fourth century was very little higher than in the fifth and that the foundation of the extension would not have reached even to the fourth century street level (Pl. 58b). Therefore somewhere to the north of the corner of this house the street level in the fourth century must have started to rise rather sharply in order to attain the level of the bridge, either by a flight of steps or by a steep ramp. Only such a rise in level could conceal the shallow bedding of the house wall; and only if such a rise already existed would the builders have made their foundation beside the street so shallow.

The numerous blocks with very worn faces reused in the immediate vicinity suggest that a flight of steps should be restored in preference to a ramp.

In any case the stretch of street connecting the Agora with the bridge at Piraeus Street can have been little more than a footpath once the Great Drain was put in. It was narrowed to the shelf only about 1.90 m. wide which lay between the west wall of the drain and the houses bordering the street at the west. On the east side, at the intersection, a house of the fourth or third century bedded its west wall directly on top of the east wall of the drain, effectively barring passage beside the drain at the east. The passageway on the west side, however, narrow as it was, seems to have been in continuous use. Between the drain and the houses bordering the street at the west we dug eight successive layers of hard road metal, which bore witness to the passage of considerable traffic over a long period. The highest street level left beneath the deep Byzantine fill was of the early fourth century; the successive layers beneath became gradually earlier, the seventh producing an ostrakon of Themistokles together with early fifth century sherds, and the last containing fragments of the sixth century, together with some Geometric. We did not dig to bottom, though more than half a meter of filling remains, perhaps of sixth century and earlier road levels.

The change in level at the crossroads and the narrowness of the north-south street to the north, where it was confined to the space between the drain and the houses at the west, preclude the passage of wheeled traffic into the Agora from Piraeus Street by this route after the drain was built. Before the drain was put in, the Street of the Marble Workers was a wide (about 5 m.) passage between the houses, left no doubt for the drainage from the south to pass through, and used at the same time as a street for foot traffic.

Early in Roman times the line of the street north of the bridge was shifted to the east, over the course of the drain itself. The installation of a double line of tile conduits made possible the filling in of the space between the drain walls, formerly an open ditch. As has already been suggested, this new road was carried up to the bridge on a ramp; again there are no traces of wheel ruts on the cover slabs of the bridge which could have been made by traffic passing up to Piraeus Street from the Agora at the north. The houses at the west seem to have encroached over the line of the older street, narrowing the later one. A few blocks still standing on top of the west wall of the drain may belong to Roman houses built directly on the drain wall beside the later street. The inscribed marble grave stele already mentioned (Pls. 56c, d, 58a), which lies just to the west of the post-Sullan channel block over the drain, seems to have been built over by the corner of a later house; the letters along the east and south sides of the stele are very fresh where they were protected by the walls built over them; the rest of the letters, which were presumably exposed in the floor in the house, are so worn as to be in part illegible. The top lines of the stele, lying toward the east, are very fresh; and a block of stone lying beside the stele to the north,

perhaps a bedding stone of the house still in place, lies exactly in the line projected northward of the letters which have been preserved because they were covered by the wall corner. Thus the width of the Street of the Marble Workers at its entrance to the Piraeus Street from the north was narrowed by houses in Roman times to little more than three meters.

Two narrow streets or alleys branching from the Street of the Marble Workers may be mentioned here. Each had its own drain, and the course of each can best be traced by its drain, since little other evidence for either is left. The first of these ran eastward up the slope of the Areopagus, leaving the older left branch of the Street of the Marble Workers nearly opposite the north end of House B (plans, Figs. 1, 5). It passed the archaic cemetery to the north, crossed Areopagus Street and continued up the slope between the houses to connect with a rock-cut stair leading to the upper heights. The drain under this alley brought down much of the Areopagus rain-water to the Great Drain in the bottom of the valley. In Hellenistic times the lower end of the side drain was blocked off; a series of wall beddings cut in the virgin soil crosses its line and one of these beddings is carried over the drain channel by a packing of stones. Evidently a house was built across the line of alley and drain in Hellenistic times and access to the bottom of the valley from Areopagus Street was closed.

The second branch street or alley (plan, Fig. 1) left the Street of the Marble Workers part-way up the lower slope of the Hill of the Nymphs, running toward the south. It passed just to the east of the unfinished Mycenaean chamber tomb, its line marked by a tile drain, and skirted the lower slope toward the south. Parts of the retaining wall along its west side, patched and repaired in Roman times, seem to go back to the fifth or fourth century before Christ; and the bedrock where it was exposed along the line of the alley is worn smooth by foot traffic. This alley evidently gave access to houses at the south, along the lower slope of the Hill of the Nymphs, and remained open perhaps well into Roman times or until it was blocked by the construction of House S.

Was the Agora closed to wheeled traffic? The only streets entering it came in at the corners. Long buildings of Hellenistic times, the Middle Stoa and the Stoa of Attalos, effectively closed off the Agora to south and east. The Panathenaic Way passed between the ends of these buildings;⁴⁸ a branch ran eastward from it, between the south end of the Attalos Stoa and the Library of Pantainos, leading to the Roman market of Caesar and Augustus. A short flight of steps led into this street. As noted elsewhere,⁴⁹ this entrance to the Agora was thereby closed to wheeled traffic in the second century of our era.

On the opposite side, the slope of Kolonos Agoraios, rising sharply behind the

⁴⁸ Proof for the identification of the Panathenaic Way is given, *Hesperia*, XVIII, 1949, pp. 134 ff.

⁴⁹ *Hesperia*, XVI, 1947, p. 203, pls. XLIV, XLIX; XVIII, 1949, p. 213.

older public buildings on the west side of the square, made access to the Agora difficult. A passageway between the Temple of Apollo Patroos and the Metroon gave access to the temenos of the Hephaisteion; but this too was crossed by steps, at any rate in the Roman period. At the southwest, two roads, Areopagus Street and the Street of the Marble Workers, led southward; but both were closed to wheeled traffic by steps.

The only avenue through the Agora open to wheeled vehicles seems to have been the Panathenaic Way itself. This wide thoroughfare, which took its name from the processions which passed along it, had to be sufficiently broad and of such gentle gradient that the ship on rollers which was part of the Panathenaic procession could pass upward to the Acropolis. It seems to have been the only way of passage through the Agora which could be used by wheeled traffic; whether it was normally so used or whether only on the occasion of processions like that of the Panathenaia, we do not know. Wheel ruts appear in the pavement laid early in Imperial times both beside the east end of the South Stoa and well outside the Agora to the southeast, but these may have been made by traffic which skirted the Market Place at the south by the street which passed behind the South Stoa, then turned into the Panathenaic Way after it had emerged from the market square between the Middle Stoa and the Stoa of Attalos. There was evidently "no thoroughfare" for wheeled traffic through the Agora from east to west and from north to south. If it had been considered advantageous that vehicles pass through the market square, relatively slight adjustments in the streets to southwest and southeast could have opened the way; since these adjustments were not made, the inference is that the Agora was purposely kept free of carts and wagons, and the likelihood increases that even the Panathenaic Way which passed through the square from northwest to southeast was normally kept closed to wheeled traffic.

MELITE STREET

We can indicate very briefly the need for a street along the southwest and west limits of our area, and sketch its probable course. It has been named Melite Street because we know that the slopes of the Pnyx and the Hill of the Nymphs as well as part of Kolonos Agoraios⁵⁰ were included in the deme of that name. A street running along the lower eastern slope of the Hill of the Nymphs would pass either through or along the eastern border of the deme of Melite; we do not know how far it extended toward the east. The street must have existed from early times; it led through the gap between Pnyx and Areopagus which was the only way of communication from north to south, and which must have been used from the time when Athens was first settled. The road along the slope of the Hill of the Nymphs was the counterpart of Areopagus Street on the opposite side of the valley. The latter led down to the Agora, passing to the east of the Kolonos; the former must have gone along the ridge of

⁵⁰ See above, p. 140, notes 10 and 11.

Kolonos and been the main thoroughfare from southwestern Athens to the region of the Dipylon and the Sacred Gate, an intersection with Piraeus Street giving westward access to the Piraeus Gate. Since passage from north to south through the Agora by way of Areopagus Street and the Street of the Marble Workers was closed to wheeled vehicles by flights of steps in both, the only way open to carts and wagons entering Athens by the Dipylon and headed for the southwestern part of the town must have been by a street which passed outside the market square and behind the Hephaisteion at the west. Thus all the traffic entering the city by the Dipylon or the Piraeus Gate and heading for southwestern Athens must have passed up Melite Street. In its course between Piraeus Street and the gap between Pnyx and Areopagus it must have been crossed by two others: near the gap by a branch of Areopagus Street heading for the Assembly Place on the Pnyx, and further down the slope by the Street of the Marble Workers, heading upward toward the gate in the city wall in the saddle between the Pnyx and the peak of the Hill of the Nymphs.

A short stretch of Melite Street is shown on Dörpfeld's and Judeich's plans.⁵¹ It lies entirely outside our area; most of its course, in fact, must be covered by the modern Street of the Apostle Paul, which follows the same line for reasons of topographical necessity. Part of its course may lie under the houses on the west side of the modern street. A year or two before the war trenches were dug in the west side of Apostle Paul Street to lay a modern drain; and traces were found near its entrance to the square south of the Hephaisteion of an ancient drain running from south to north, no doubt under the course of Melite Street.

THE POROS BUILDING

BY MARGARET CROSBY⁵²

In the middle of the fifth century B.C. a large building, characterized by the use of massive poros blocks in its foundations, was set into the valley below the northwest slopes of the Areopagus about 100 meters south of the southwest corner of the Agora square. Its north wall fronted on Piraeus Street, the street which ran south of the Agora and westwards to the Piraeus Gate. Its long west wall bordered the early open drain, subsequently incorporated into the Great Drain, which ran northward in the bottom of the valley between the Areopagus and the Hill of the Nymphs (Pl. 55b; Figs. 1, 5; in the photograph arrows indicate the corners of the building).

⁵¹ *Ant. Denk.*, II, pl. 37; *Topographie*², plan I.

⁵² I wish to thank my colleagues at the Agora, particularly Homer A. Thompson, for their assistance and many helpful suggestions.

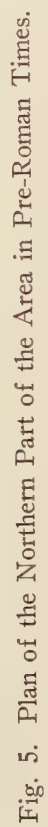


Fig. 5. Plan of the Northern Part of the Area in Pre-Roman Times.

EARLY HISTORY OF THE AREA

The remains of the building and of its successors have obscured much of the earlier history of the area and a considerable depth of deposit below the fifth century floors still remains unexplored at the west and north. One well of the Protogeometric period, two of the Geometric and two of the Archaic beneath the southwestern part of the building and scraps of walls of the sixth or early fifth century at the northeast are probably to be assigned to private houses.

A heavy polygonal limestone wall, partially exposed just north of the building at the south edge of Piraeus Street, clearly is not a house wall (Pl. 62b, c). It has finished faces four meters apart and apparently it continues northeast into the street area under firm road metal. No evidence for the date of its construction nor for its purpose has been found; it had passed out of use by the middle of the fifth century when the north wall of the Poros Building Annex was built. Beneath the floor level of the northernmost room of the east wing of the Poros Building three large stones of another heavy limestone wall have been exposed. These are set against bedrock at the east and may represent an early terrace or drain wall marking the east side of what seems to have been the original low point in the valley. Blocks of another heavy wall, or walls, set on bedrock a meter and a half below the fifth century floors, have been exposed in the sides of two wells and at the bottom of a late pit in the west and central part of the area.

GENERAL SCHEME AND PRESENT STATE OF THE BUILDING

The Poros Building consists of a large open courtyard at the south with small rooms to either side of a central corridor in the northern two-thirds, five rooms forming the west wing but only three the east wing.⁵³ Instead of two rooms at the northeast corner corresponding to those at the northwest there is a complex of rooms, probably four, on a different orientation extending both east and north of the main building and forming a rectangle about twelve by eight meters. Most of the walls assigned to these rooms at the northeast, referred to below as the Annex, seem to be contemporary with the main building. There are, however, traces of earlier walls and it is not impossible that there was an earlier building here around which the main building was fitted. Nowhere has any direct connection between the two been established. It is therefore uncertain whether the Annex was part of the main building or a separate structure.

The main entrance to the building must have been from Piraeus Street at the north, probably by way of the corridor. A second entrance directly into the court from the open square beside the street of the Marble Workers may have existed for those approaching from the southwest. At the southeast a projecting spur of the

⁵³ The building is 37.56 m. long and 16.50 m. wide at the south. The courtyard measures 11.60 m. from north to south by 15.60 m. at the south, 14.80 m. at the north. The rooms are *ca.* 4.50 m. square.

Areopagus was cut back to make room for the building and the higher level outside precludes any access from this direction. Prior to the construction of the Great Drain at the beginning of the fourth century the western rooms could easily have been entered directly from the street or alley beside the then open drain at the west. It seems more likely, however, that these rooms were entered only from the corridor.

A glance at the plan and photographs (Pls. 55b, 59-64; Figs. 1, 5) will show the sorry state in which we found the building. It suffered heavily from the constant use and successive rebuilding of the area throughout the classical, Roman, and Byzantine periods. In the tenth and eleventh centuries after Christ, when the ground level was two and a half to three meters above the floors of our building, the local residents were still digging down into the earlier levels in search of building blocks and material. Long stretches of its original walls are now empty of all blocks and others are obscured by later walls built on the same lines. The original plan of the building proper (although not of the Annex) and its floor levels have been fairly well established but many details of plan and construction are far from clear.

CONSTRUCTION

The wall socles are partly of soft white poros, partly of Acropolis limestone. Eight squared poros blocks, 0.55 m. wide, are still in place in the south wall (Pl. 60a) and disintegrated bits of poros found against the bedrock scarp at the east suggest that similar blocks were used for the east wall of the court. North of the court the east wall is of large polygonal limestone blocks chinked with smaller stones, some of which are laid in a ladder pattern and are set against the higher bedrock at the east (Pl. 59b). The faces of the blocks are somewhat rough. Of the original west wall there remain only two poros blocks at the southwest corner of the southern room, two similar blocks at the northwest corner of the building and a foundation of small cut limestone blocks beside the two northern rooms. The two blocks at the southwest corner of the building, measuring 1.25 m. x 0.45 m. x 0.60 m. and set on bedrock with their tops 0.10 m. above the original floor, form the corner of the room (shown at lower left in Pl. 59b). Uneven bedrock against the east and south faces of the southern block stands 0.10 to 0.25 m. higher than the bottom of the block and so precludes the restoration of blocks of similar dimensions either in the south wall of the room or in the west wall of the court, at least at its north end. The two poros blocks at the northwest corner of the building are somewhat smaller, measuring 0.80 m. and 0.70 m. in length, and their tops are 0.25 m. and 0.35 m. above the original floor. The foundations beside the two northern rooms, 0.45 m. wide, are of cut grey limestone, with the individual pieces measuring 0.30 m. to 0.55 m. long, 0.10 m. to 0.20 m. thick and with a maximum height of 0.30 m.; they are set irregularly side by side with flat picked surfaces on the faces of the wall and are chinked with small stones. The construction

suggests that we have the bottom of a rubble wall rather than a bedding for large blocks.⁵⁴

The cross walls between the rooms (with one exception noted below), the original corridor walls, and most of the west wall of the building were carefully constructed in their lower parts in rubble masonry, 0.45 m. wide, of small cut limestone blocks, which probably served as socle for a mud-brick upper wall.

The rooms, but neither court nor corridor, were roofed with simple convex and concave tiles of which quantities were found in the destruction debris of the building. The rooms were floored with smooth rolled clay. The floor of the corridor originally seems to have been a hard gravel surface, not unlike a road except in being smoother. When the corridor drain was inserted late in the fifth century a layer composed of tiny bits of dark grey bedrock was put in as flooring. The floor levels were adjusted somewhat to the natural contours, those along the east side being slightly higher than those at the west, while those in the northwest rooms were the lowest.⁵⁵

COURTYARD

No traces of interior supports were found in the large area which forms the southern third of the building, so we must assume an unroofed enclosure open to the sky. The main entrance to this open courtyard was probably from the corridor at the north, although, as noted above, a second entrance directly from the west is possible. At the south end of the corridor part of a light rubble wall, 0.20 m. wide, of the late fifth century has survived (Pl. 59a, b). The central part of the wall has been destroyed by a Roman well. The wall is perhaps a light screen or parapet on either side of an entrance (now lost in the well) from corridor to court, built at the same time as the corridor drain somewhat after the original building. The full width of the corridor may have been left open in the original plan. Of the north wall of the courtyard only the poros block at its west end and a corner cutting in bedrock at the east remain. Wide, small-stone foundations of later walls have destroyed all other traces. Except for the corner blocks the wall was probably of limestone rubble like the other interior cross walls, since, as noted above, there was not a poros block next to the one preserved at the west end of the wall.

The floor of the court sloped up gently from west to east. Near the southwest corner stood a light rubble construction, covered with good red stucco made from marble dust. It may have been an altar, bench or platform of some sort, but only a very small corner remained.

⁵⁴ The poros blocks which now rest on these foundations, two beside the north room, three beside the next room, are assigned to the fourth century rebuilding.

⁵⁵ The original floor level in the southeast room is 61.42 m. above sea level, in the southwest room 61.25 m., in the northwest room, 60.88 m., and in the northeast annex *ca.* 61.30 m.

CORRIDOR AND ROOMS

The interior walls which separate the rooms from the corridor run parallel to the exterior walls on east and west and, since the latter are not quite parallel to one another, the corridor narrows towards the north, from 4.50 m. at the south (the same width as the rooms to either side) to 3.00 m. beside the north end of the third room from the south. No certain trace of the east wall of the corridor has been found north of this point where the annex projects into the east side of the building.

Beside the third room from the south on the east side the corridor wall is of limestone rubble similar to the other interior walls, with a rough limestone block used as a doorjamb, 1.20 m. south of the corner (Pl. 60b, the doorjamb is just beyond the well curb at right). Further south the wall has been observed in the side of a Roman well and below a marble-chip pavement of a house of the Augustan period. Here a poros block is in place at both the north and south end of the middle room and a trench with limestone foundations is partially exposed between them. These poros blocks, of which only the northern one has been fully exposed, probably date from a rebuilding like those in the west wall of the northwest room.

The course of the west wall of the corridor is occupied for the most part by later walls built on the same line, but bits of the original limestone rubble wall have survived beside the southern room, and other original blocks are visible under the later wall beside the two northern rooms, including a squared limestone block, 0.42 m. wide, which marks the northern side of an entrance into the fourth room from the south (Pl. 60a). At the northeast corner of the central room however, where the cross-wall separating the two rooms is wider than elsewhere, no trace of a contemporary east wall leading south was found. Instead there was only the corner of a later wall, one row of rough cut foundation stones, resting on hard packed fill with much broken pottery which dated from the first quarter of the fourth century.

The cross-walls between the rooms, with one exception, are of limestone rubble, 0.45 m. wide. In the western wing the wall between the two southern rooms is preserved to a height of 0.50 m. (Pl. 59b). Its east end was covered by a pebble mosaic floor of the fourth century. Two clay floors were used with it, viz., the original floor of the building, and a late fifth century floor some 0.12 m. higher. Between the next two rooms the lower part of a similar wall is visible at the bottom of a plundered wall trench and below a conglomerate block of a later wall. Between the two northern rooms of the west wing the two ends of the original wall have survived. The scrap at the west is preserved to a height of 0.10 m. above the original floor; at the east there are a few pieces of cut limestone and then a roughly finished boulder, 0.40 m. wide and 0.25 m. above the floor, possibly a door jamb (Pl. 60b, 61b). The floor, however, did not carry across the line of the wall, so a solid wall between these two rooms is not precluded.

The cross-wall between the third and fourth rooms (numbered from the south)

in the west wing, wider and heavier than those to the north and south, is of squared blocks of limestone and hard granular poros chinked with small stones. At the one point between the later walls where its full width is exposed this wall is 0.70 m. wide. A break in the limestone foundations of the west wall and two bits of limestone in place beside it mark the western end of this wall.⁵⁶

In the eastern wing a limestone rubble cross-wall is partially preserved between the second and third rooms. Part of the north face of the original wall at its west end was exposed under a wall of the Augustan period and its eastern end is marked by a slight cutting in bedrock in the east wall trench. It was later rebuilt, apparently with the same blocks, slightly south of its original position. At that time it did not carry down to the original clay floor of the room. In its second period it had passed out of use by the end of the fourth century. Later walls now occupy the line of the cross wall between the two southern rooms.

The north wall of the eastern wing is preserved in a few scattered small stones at the bottom of a shallow trench in firm earth, 0.05 to 0.10 m. below floor level. Hellenistic and Roman deposit rested on these stones and the line of this wall was followed by a late house wall. The original north wall of the western wing is preserved at either end under later walls and in plundered wall trenches (Pl. 61a). At the west about one meter of the original wall remains, including the poros corner block and a limestone block adjacent to it.⁵⁷

A gutter or open drain runs the full length of the corridor parallel to its east wall (Pl. 60a, b). At the north it just cleared the west wall of the corridor and, passing out into the street, curved sharply to the northwest to join the main north-south drainage line about a meter and a half north of the building. Concave roof tiles of Laconian type, 0.87 x 0.52 m., were used as the drain in the south half. About midway in its course three large poros slabs supported the drain over the mouth of a well of the Archaic period. North of the slabs the water was carried in U-shaped cover tiles to a point two meters south of the north wall of the building where the open gutter changed to a covered drain, and broken water pipes set between poros walls were used. North of the building, the westward continuation of the corridor

⁵⁶ As noted above, there is no trace of a contemporary wall leading south, that is, of the east wall of room three. In fact the eastern end of this wall looks very much like an outside southeast corner. It is perhaps significant that this heavier wall between rooms three and four at the west is in the position corresponding to the break found in the line of the east wall of the building.

⁵⁷ About 2.75 m. east of the corner, part of a wall of small cut limestone with a finished west end is exposed under a conglomerate block of a later wall. This finished end suggests an entrance directly into the northwest room from the street. But a small drain built of poros and set against the north face of the wall runs across the approach to the hypothetical doorway. The small stones used in the wall of this drain do not seem heavy enough to have carried a cover on which people walked. Therefore, in spite of the apparently finished end of the wall, it seems unlikely that there was an entrance here. When the corridor drain was in use (in the late fifth century) the higher outside level at the north would have made it impossible.

drain has been exposed near the wall of the Great Drain; its southern wall is built of small poros stones preserved to a height of 0.60 m.; here no trace of pipe or tile was found (see Fig. 1; the westward extension does not appear on Fig. 5).

This drain was not part of the original building. The poros slabs and roof tiles in the central part of the corridor postdate both the east corridor wall in its original form and a very firm, slightly gravelly floor level associated with that wall 0.10 to 0.15 m. below the drain. To the north of the building this drain presumably replaced and so postdates the small drain set against the north face of the original northwest corner of the building. It antedates, however, the construction of the Great Drain, for a block of the Great Drain wall (somewhat tipped but apparently part of the original wall) lies athwart its line. The little pottery found in association with the drain suggests that it was built late in the fifth century and ceased to be used, in its original form, at the beginning of the fourth century, probably when the Great Drain was built.

A floor of tiny bits of dark grey stone (chips of bedrock) was found associated with the drain in the central portion. The light screen wall separating the corridor from the court to the south is probably contemporary with the drain. Perhaps a similar wall with an entrance is to be restored near the north end of the corridor close to the point where the open gutter becomes a covered drain. Later walls and a large irregular pit of late Roman or Byzantine disturbance have confused all evidence here.

NORTHEAST ANNEX

The Annex is clearly defined at the north by a slightly polygonal wall of poros and Acropolis limestone blocks running due east and west. The change in orientation corresponds to (or is followed by) that of Piraeus Street immediately to the north which approaches the middle of the city in a southeasterly direction and then jogs due east some five meters after crossing the Great Drain and so continues probably as far as its junction with Areopagus Street (Fig. 3).⁵⁸ The north wall of the Annex is of the mid fifth century and so contemporary with the building proper. On present evidence the exact date and relationship of the other walls, shown on the plan, are far from clear. The division into rooms, and especially the restoration of the broken west wall beside the corridor, must be considered tentative. Its eastern limit as now shown on the plan is a wall used in varying forms from the late Archaic to the late Roman period. In the fifth century this may have been an interior cross wall rather than an exterior one, and the Annex may have continued further east under the Roman bath

⁵⁸ Near the eastern limit of the excavated area, some 40 meters east of the Great Drain and 5 meters west of the line of Areopagus Street, approximately the same orientation is preserved in the north wall of a bath of the early Roman period and in a limestone wall of classical or Hellenistic date. The street thus continued due east at least to this point.

where the lower levels have not yet been investigated. The most striking feature of the area as found was the layer of fine marble dust and chips which covered the entire region of the Annex from the end of the fifth to about the middle of the fourth century. It seems clear that marble was being worked on the spot at that time.

The north wall, 0.70 to 0.80 m. wide, stands to a height of three courses, 1.20 m., near its west end, but only a few centimeters of this height rose above the contemporary ground level (Pl. 62a, b). Several scattered paving slabs (Pl. 62c), rough finished blocks 0.40 x 0.50 m., were found on the outside ground level to the north of this wall, and a hard clay floor at the same level was found inside. At the west the wall abuts against the early pre-building wall mentioned above. No certain trace of it has been found further west where wide foundations of small stones probably to be associated with the fourth century phase of the building proper obscure its line. The corridor drain, however, changes from an open gutter to a covered channel just at the point where the line of this wall, if projected west, meets the drain. This suggests a relationship of some sort between the corridor and the Annex wall and is the strongest evidence for the association of the Annex and the building proper. Further east a section of the wall was completely removed in late Hellenistic times. Near the northeast corner four courses are preserved, the bottom one a roughly shaped poros boulder against whose southwest corner a cistern was built in the third century. At the corner the top course has a finished north face, against which are set two relatively small poros blocks of a wall leading north. These are later in date, and are probably contemporary with marble workers' floors to the south. Near the west end of the wall the exposed top of a limestone block, a centimeter or two higher than the floor, is considerably worn and must have been walked across at some time (Pl. 62b). The slightly curved top surface of the block argues against restoring an original entrance here. The wear occurred at the end of the fifth century and in the early fourth at a time when the lowest marble dust floor was in use. Quantities of grey and blue limestone working chips found in the construction fill north of the wall show that limestone was the material used for much of the wall, probably for all above ground level. A construction date near the middle of the fifth century is established by the bits of pottery found with the chips and in the clay fill from its footing trench.

The Annex east wall, exposed for a length of eleven meters, is of different construction in the northern and southern halves (Pls. 61a, 63a, b). The east face is nowhere visible for it is overlaid by the high walls of the Roman bath.⁵⁹ In the

⁵⁹ This high bath wall and the post-Herulian marble-chip floor just to the east may give a deceptive impression of a natural rise in levels on this line. Bedrock has nowhere been exposed under the western half of the bath; a well-head in place 1.50 m. below the marble-chip floor is about the same level as the mouth of an early Roman well just north of the northwestern room of the Annex.

northern half there is a rubble wall of rounded field stones used with a hard floor of marble dust and chips, which is set on an earlier wall of small cut limestone. This lower wall, very like the interior walls of the building proper, is associated with a floor at the same level as the fifth century floor in the northwest room of the Annex. The few sherds found on this floor, however, were no later than the sixth century B.C.

Beside the southern room the east wall of the Annex is of large grey limestone blocks of angular polygonal construction chinked with smaller stones mostly set horizontally. The wall face is rough-picked, designed to receive stucco, some of which is still in place. The wall is standing to a maximum height of 1.40 m., and is set on bedrock just below the marble-dust floor. The north and south walls of the southeast room, of squared limestone blocks, are set against apparently finished ends of the polygonal east wall.⁶⁰ The southern wall continued in use after a cistern had been opened against its south face in the late fourth century, and it was again used in the early Roman period. The western ends of both the north and the south walls of the southeast room in their present form, including the doorway in the south wall, are probably part of the late fourth century, post marble-workers, rebuilding. The door in the north wall of the room, for which one of the limestone blocks was cut down, seems to have been part of the original wall and was used with the marble-dust floor. There is no direct archaeological evidence to show that any of the walls of this room were earlier than the marble-dust floor. We have not, to be sure, dug below the floor except where it was broken by later disturbances, but it seems safe to assume that here, as elsewhere in the area, the earliest floors of marble dust were of the end of the fifth century. It seems unlikely, however, that workers in marble would have built as impressive a wall as the polygonal eastern one simply for a workshop. Therefore, since this length of wall continues the line of an earlier wall at the north and is at right angles to the north wall of the Annex, we have tentatively assigned it also to the middle of the fifth century.

Of the interior walls, the wall separating the two northern rooms (lying slightly west of the east wall of the paved court of the Augustan house) is contemporary with the north wall. Part was later rebuilt, but the foundations and a small block of the first course clearly bond with the north wall. The line of this wall, parallel to the east wall of the Annex, can be traced to a point nine meters further south where some stones of a fourth century or Hellenistic rebuilding rest on heavier limestone blocks, presumably part of the original wall. The two eastern rooms of the Annex thus are each 4.50 m. wide (the same as the rooms of the building proper).

The west wall of the Annex, which here serves as the east wall of the corridor,

⁶⁰ Only the inside corners are exposed. At the south the exterior corner is still concealed by the wall of the Roman bath, and at the north the situation is much confused by the four cross walls partly overlying each other, of which two are later, and one earlier than the wall that ties in with the east wall.

is in three parts, short legs at north and south with the same orientation as the building proper, and a longer central section set at a slight angle. Of the central section there remains a string course, 0.60 m. wide, of irregularly cut limestone slabs set on a foundation of small poros stones. It seems to be contemporary with the building, for both the grey floor associated with the corridor drain and an earlier clay floor just below it carried against the string course. It was also used in the rebuilding in the late fourth century; a limestone orthostate of this rebuilding has survived at the north end. The exact position of the northern and southern legs of this wall is uncertain. To the southern leg we have assigned a few small poros stones and a small limestone boulder which are just west of the house wall of the Augustan period. For the northern leg we have used two large building blocks which underlie later walls, but which seem to have no relation to them. There is no direct evidence for the date of either the northern or the southern end of the wall, but the levels and positions seem appropriate for the fifth century building and so we have attributed them to the original construction.

The north-south wall shown on the plan along the east side of the southwest room of the Annex seems to antedate the building (Pls. 63a, 64a). The southern end of the wall, a single course of rough limestone blocks about the size of a man's head, is crossed by two drains. The northern one with poros walls set on grey limestone slabs is incorporated into the wall and so contemporary with it. This was replaced by a small terracotta drain just to the south. The small amount of pottery found in association with wall and drain suggest that the wall and northern drain had passed out of use by the mid fifth century, and so antedated the building, and that the southern terracotta one was in use in the second half of the century, and so was in use with the building. Presumably it flowed into the corridor drain. The northern half of this early wall is set in a slightly more westerly direction. The slight angle at which the two parts met was covered by a Roman house wall, under which a return to the east of the northern half was discovered. The disturbance caused by the Roman wall made it impossible to tell whether the southern part originally abutted against this return, or whether there was a gap or possibly a doorway between the two parts of the wall. The tiny scraps of pottery found in association with this northern part suggest that it also had passed out of use by the middle of the fifth century. Then it was apparently replaced by a wall about a meter further east which continued the line of the crosswall between the two northern rooms (see above).

DATE OF CONSTRUCTION

Some of the filling of the building lay undisturbed under the courtyard at the south. This area had been much eaten away in earlier times by water flowing down the hillside at the south and east; the gravelly deposit left by the water contained pottery of the Geometric and Protogeometric periods. A deep filling had been dumped

over this to level the area for the floor of the courtyard. A large quantity of pottery from this filling was of the first half of the fifth century, the greater proportion of the second quarter, a few pieces as late as just before the middle of the century. Five ostraka were found in this filling; one of Themistokles, probably from an *ostrakophoria* of 471/70 B.C., three of Kimon, who was ostracized in 461 and one of the Elder Alkibiades, probably ostracized in 460.⁶¹ The pottery and the ostraka thus suggest a date for the construction of the building at about the middle of the fifth century. The small amount of pottery associated with the construction which was found further north in the rooms and corridor is of the same period as that from the filling below the courtyard floor.

The corridor drain was added after the original construction but before the major rebuilding of the fourth century. Some of the pot sherds found under the drain are of the third quarter of the fifth century, but none needs be later than the early part of the fourth quarter. Thus the drain was probably built in the fourth quarter of the fifth century.

Soon after, at about the end of the fifth century, the building suffered considerable damage both to the walls and to the roof as shown by the masses of broken roof tiles found on the fifth-century floors.

In the Annex no mass of construction filling was dug that could be associated with the walls; the tiny scraps of pottery found in scattered spots have been mentioned above. These showed that the heavy north wall was built about the middle of the fifth century and so was contemporary with the building proper. The presence of earlier walls with the same orientation as the Annex and the awkward relation between Annex and building proper suggest that the building proper may have been fitted around or adjusted to a pre-existing building, which however was rebuilt at the same time, that is about the middle of the century. No masses of destruction fill were found in the Annex corresponding to that found in the rooms of the building. Marble chips and dust covered the whole area, in most cases resting directly on the floors of the Annex. The lowest layers of chips seem to date from about the end of the fifth century. The marble workers thus moved into the Annex at about the same time as they did into the northern rooms of the building.

LATER HISTORY OF THE BUILDING

After the building had been damaged at the end of the fifth century, marble workers moved into the northwest room of the main building where they were established in the first quarter of the fourth century. They used also the north half of the corridor where their drain, found full of marble chips, overlay the original corridor drain. Work was started on a well in the northwest room, but was given up

⁶¹ Inv. P 18557, P 18339, P 18536, P 18555, P 18537. The date 460 for the ostracism of the Elder Alkibiades is suggested in an article by Eugene Vanderpool to be published shortly in *Hesperia*.

because of a collapse in the soft bedrock at the sides. The abandoned shaft was filled with marble chips and broken pottery of the first quarter of the fourth century. The walls of this room were rebuilt sometime before the middle of the century; the north and south walls were each pushed a trifle further north, large conglomerate blocks were used for the corridor wall, and poros blocks, of which two are in place, were set on the limestone foundations of the original west wall (Pls. 61b, 64b). The eastern

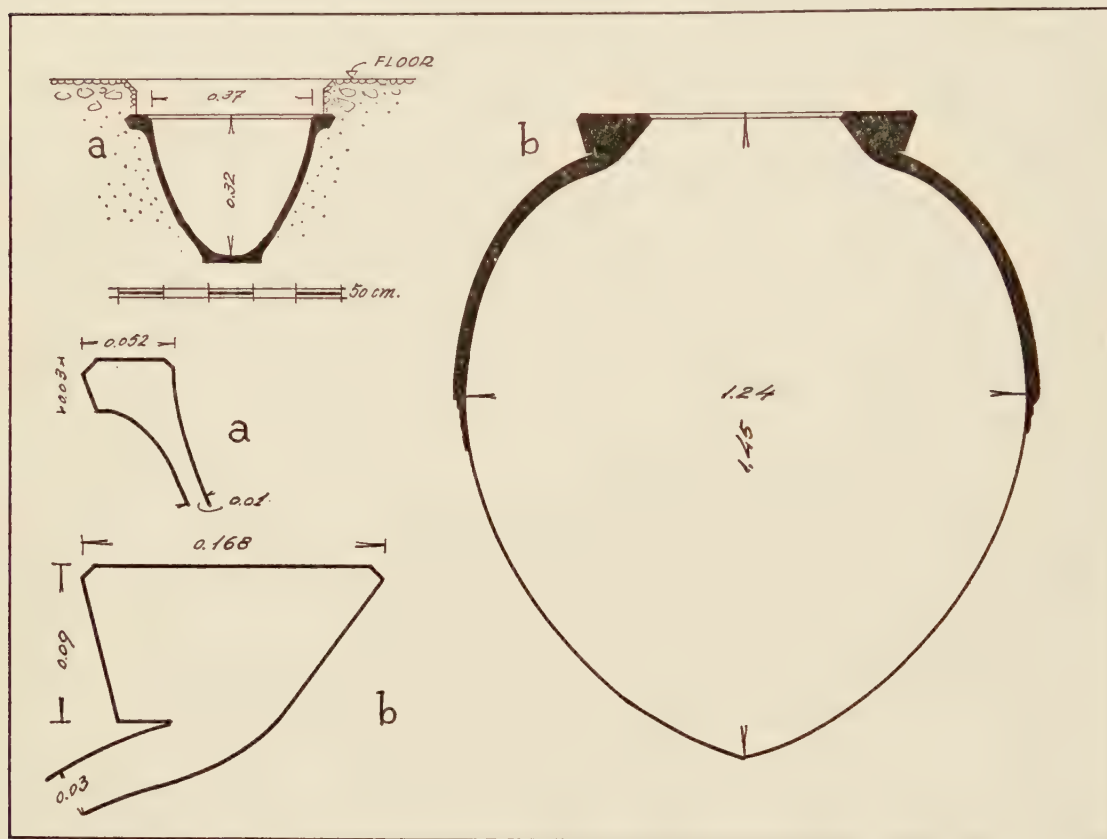


Fig. 6. Sections of Basin and Pithos.

block of the southern wall of the room rests on some marble chips and the conglomerate blocks of the corridor wall are later than the first drain used by the marble workers; hence the re-building postdates the earlier workers in marble. A terracotta basin in the northwest corner of the room and a pithos⁶² near the center (Pl. 64b; Fig. 6), were both found filled with marble chips, as was also the footing trench for

⁶² Inv. P 19423 and P 19422. Part of a graffito is preserved on two broken non-joining rim fragments which reads $\Delta\Delta\Delta\ldots\text{III}$. For pithoi with similar graffiti, probably representing the price, see Robinson and Graham, *Excavations at Olynthus*, VIII, pp. 312-316; XII, p. 205, note 65. The numbers at Olynthus range from 53 dr. 4 obols to 31 dr. 1 obol.

the pithos. The basin seems to be later than the rebuilt north wall, of which only the trench was preserved at the west end. The fourth century levels here were badly broken and the exact relation of pithos and basin to the rebuilt walls is uncertain.

A pyre burial of the mid fourth century (*Hesperia*, XX, 1951, pp. 114-115) which was laid close against the face of a conglomerate block of the rebuilt corridor wall gives a terminus *ante quem* for the rebuilding.

The details of the fourth century reconstruction are less clear in the rest of the building. The survival of most of the original wall lines, interior as well as exterior, into later periods, the absence of fourth century and Hellenistic wells and cisterns within the area of the building proper, and scraps of fourth century pebble-mosaic floors found in many parts of the area suggest the possibility that the building was restored on much the same plan and presumably for the original use, rather than that it was converted into houses or workshops. The only certain change in plan at the time was the elimination of the crosswall between the two southern rooms in the west wing. The chief obstacle, perhaps an insurmountable one, to this hypothesis is the pyre burial of the mid fourth century in the northwest room. Such pyres are usually considered evidence of a period of abandonment; they certainly seem to have no logical place within the walls of a public building. If some explanation of the pyre could be found we could assume that the building proper survived well into the third century.

The later history of the northeast Annex, and the specific walls used in any given period is much confused. At the end of the fifth century a very hard floor of marble dust and chips formed over the whole area and extended beyond its walls both north and south. A second layer of dust and chips was found above the first in the northern rooms; the upper layer at the northeast, composed of very fine dust, apparently a mixture of marble dust and emery, seems clear evidence of marble working on the spot. A small marble perfume bottle⁶³ (Pl. 64c) found among the upper chips is perhaps an example of the work done here. The latest pottery associated with the marble workers is a fragmentary red-figured lid of about the middle of the fourth century (Pl. 64d).⁶⁴

⁶³ Inv. ST 450. Diameter 0.061 m.; preserved height 0.083 m. It was made in two pieces, then joined with marble cement of which traces are visible in the photograph. The top of the neck is broken off, but the surface is fairly smooth and the bottle may have been reused in this condition. The diameter of the hole is 0.006 m. The bottle is of creamy white crystalline marble with smooth soft finish outside, tool marks inside. The average thickness of the wall is 0.005 m. Black-figured Attic vases of similar shape, though larger, are known, *Jahrbuch*, LXI-LXII, 1946-47, p. 65, pls. 13 and 14. Our marble bottle, dating probably from the first half of the fourth century, will, if related at all, be a very late descendant.

⁶⁴ Inv. P 20853. H. with knob, 0.075 m. Diam. est. 0.205 m. Egg pattern on the down-turned rim; the edge of the rim reserved, the underside of the lid glazed black; much of the glaze outside fired red; white for the Eros. The following note was provided by Miss Lucy Talcott. A late example of Schefold's Type B (Karl Schefold, *Untersuchungen zu den Kertscher Vasen*, Berlin

Later two cisterns were built, one in the northwest room of the Annex, the second against the south face of the south wall toward its east end, and the two were connected by a channel 10.35 m. long. Subsequently the channel was blocked and the northern cistern was used for a short period close to the end of the fourth century. Its stucco was preserved to a point some 20 centimeters above the upper layer of chips, on which its built walls rested, and against which the cistern stucco was laid. The cisterns were originally built perhaps in the third quarter of the fourth century, clearly before the fill accumulated in the draw shaft, and after the highest layer of marble chips had gathered. A limestone wall, *ca.* one meter north of the fifth-century north wall of the Annex, with a wide door leading in from the street, replaced the original north wall in the period of the cistern. (The east end of this wall is shown in Pl. 62c).

South of the Annex, east of the building proper, an unfinished well and a rectangular shaft with two tunnels leading southwest from it, were dug and abandoned in the second half of the fourth century. Masses of clean red clay found in the well suggest that an industrial establishment in which clay was used may have stood near by. In Piraeus Street just north of the mouth of the corridor fragments of moulds from bronze working were found with pottery of the second half of the century.

In the second half of the third and in the early second century considerable reconstruction took place in the northern half of both building and Annex. No significant Hellenistic levels were found in the southern half where the floor levels of the fourth century B.C. continued into the Augustan period.

In the northeast corner of the Annex a third cistern was built, apparently in the late third century, and was connected by a channel with the earlier channel from the southern cistern. These two remained in use until the second century. Some of the earlier walls were reused and the orientation was the same, but no clear plan is preserved. A small north-south stone-built drain, about eleven meters west of the Annex east wall, and one meter east of the original corridor drain, belongs also to the third century and suggests the survival of the open corridor.

A north-south wall was built through the two northern rooms in the west wing. With this wall is associated a terracotta drain, which at the south lies above the corridor's west wall, then turns west through the new wall and across or through the original west wall of the Poros Building to empty into the Great Drain. These are the earliest certain intrusions into the lines of the building proper, and probably date from the late third or the second century B.C.

and Leipzig, 1934, p. 138). The scheme is the same as the more careful lid in Naples (Schefold, *op. cit.*, no. 41; *Mon. Ant.*, XXII, 1914, p. 680, fig. 233), but the style and hand nearer to *Olynthus*, V, pl. 111, no. 216. Compare also a lid from the Pyxis Workshop (Schefold, *op. cit.*, pl. 16, no. 581), close to the middle of the fourth century. *Ca.* 360-350 B.C.

Precise details of the late Hellenistic period are lost in the confusion caused by Sulla's sack and by the subsequent rebuilding, late in the first century B.C. Masses of destruction debris are clear indications that this area was plundered. A great deal of iron slag was found in the debris especially at the northeast. The pottery found with the slag runs well down into the first century B.C., clearly postdating Sulla, but it seems probable that iron was being worked here before Sulla and the deposit as we find it is a mixture caused when blocks were pulled out of the earlier walls in preparation for the next rebuilding.

Near the end of the first century B.C. the area was rebuilt. Two private houses, of which the courts with marble-chip pavements are well preserved, replaced the Poros Building.⁶⁵ The floor of the southern house (P-Q) lies at about the same level as that of the fourth-century building. The northern house (R) lies some 50 cm. higher, corresponding to the Hellenistic levels in that part of the area. At the same time as these houses, or shortly thereafter, a large bath was built to the east of our area, a structure which was remodelled several times, and which continued in use probably into the fifth century of our era.

The Augustan houses were replaced in the second century by other houses. Now for the first time the north wall bordering on Piraeus Street carried in a straight line from the east side of the Annex to the bridge over the Great Drain, so eliminating the jog caused by the different orientation of the north walls of the Annex and of the building proper, which had hitherto been preserved.

For the later Roman (post-Herulian) period scraps of walls, plundered trenches, house drains, etc. show that the area was almost continuously lived in and was constantly being rebuilt, into the sixth or the seventh century of our era, but no plans of house or houses can be recovered. At the east, the bath was again in use in the second half of the third century; its elliptical tile drain now crossed the Great Drain Bridge. The bath will have been quickly rebuilt, it would seem, after the Herulian destruction of A.D. 267 and it remained in use, with some rebuilding, until latest Roman times.

IDENTIFICATION

A fifth-century building of the size of our Poros Building placed near the Agora would almost certainly have been a public building of some sort. The plan, large court and small rooms either side of a central corridor, is a simple one that might have served a variety of purposes. It does not seem to have been a common one, however, for I have found no similar buildings in the published reports of other Greek sites. The only parallel noted to date is also in the Athenian Agora, the so-called "Greek Building" southwest of the Tholos. This is a trapezoidal enclosure, measuring 26 meters by 20.80 meters, with a large area at the north and almost certainly three

⁶⁵ See below p. 277 where P and Q are treated as separate houses.

rooms on either side of a central corridor in the southern three-quarters of its length.⁶⁶ It was built in the second half of the fifth century and apparently was destroyed by the soldiers of Sulla in 86 B.C. Squared blocks of soft white poros were used in its exterior walls, and small pieces of Acropolis limestone for the interior walls.

The two buildings of approximately the same date, construction, and ground plan, both standing near the southwest corner of the Agora, were presumably planned to serve similar purposes. The size and the central location, particularly that of the northern one at the corner of the public square only twenty-two meters south of the Tholos, where private ownership seems most unlikely, suggest that they were public rather than private buildings.

If the similarity between the two buildings does not, however, seem sufficient to be conclusive as to their common character, one must consider the possibility that the Poros Building may have served some semi-private purpose. In this case it might have been one of the *συννοκίαι*, the lodging or apartment houses known to have existed in ancient Athens.⁶⁷ The ground plan, with its series of small rooms that could have been rented separately, would suit some such use. There are two practical objections to such a theory. First is the location of the Poros Building, set strategically at one of the main cross-roads of the city. And second is the fact that in the area of the Poros Building there is no provision for any adequate water-supply for domestic purposes, such as we would expect to find in connection with any building designed as living-quarters. No single well in the vicinity has as yet been found which can be associated with the Poros Building at the time of its construction, or at any time during the second half of the fifth century. Attractive, therefore, though the description of our building as an apartment house may at first appear, the difficulties in the way of this identification seem considerable, and we must turn to the possible uses of both structures as public buildings.

The suggestion has been made that the two buildings were law courts, *dikasteria*.⁶⁸ Topographically this is very appealing. Most of the dikastic courts met in or near the Agora. Although some trials were held in buildings not primarily designed for court use and others were still held in the Heliaea, the old open-air meeting place, at

⁶⁶ The building, mentioned in *Hesperia*, XVII, 1948, p. 168; Suppl. IV, p. 111, has not been published in detail but appears on all the recent plans of the Agora. Most of the area was stripped to bedrock in later times, and little except the cutting in the slope of Kolonos for its west side and the plundered wall trenches remains. The three rooms along the west side, each *ca.* 4.50 m. square, are certain. The evidence for those along the east side is less clear.

⁶⁷ Demosthenes, XXXVI, 6; XLV, 28; Aeschines, I, 124, 125, *et al.* Two references from the Lexicographers to a large house in Melite (the deme in which our building probably lies, pp. 140-143 above) are given by Curtius, *Stadtgeschichte von Athen*, 1891, p. xcv. The earlier of the two texts, Zenobius, II, 27, from which the second, Hesychius, seems to be derived, is so garbled as to make the reference to the deme Melite doubtful. (cf. Aristophanes, Oxford text, II, *fragmenta* Γεωργοί, 115). It is thus merely another reference to a large house in which rooms were rented.

⁶⁸ *Hesperia*, XVII, 1948, p. 168.

least one specific court building, the Parabyston, and probably more, was standing in or near the Agora already by the fourth quarter of the fifth century.⁶⁹

A specific location for one or more law courts in the southwestern part of the Agora area is supported both by literary and archaeological evidence.⁷⁰ Plutarch, *Moralia, de Genio Socratis*, X, 580 E-F, describes a misadventure met with by Socrates' disciples, πορευομένοις δ' αὐτοῖς διὰ τῶν ἑρμογλύφων παρὰ τὰ δικαστήρια. That the southern building was in a district used by marble workers is abundantly clear. Its position would also fit admirably the lower court mentioned by Bekker, *Anecd. Gr.* I, 253: Ἐπάνω δικαστήριον καὶ ὑποκάτω : ἐπάνω μὲν δικαστήριον τὸ ἐν Ἀρείῳ Πάγῳ· ἔστι γὰρ ἐν ὑψηλῇ λόφῳ· κάτω δὲ τὸ ἐν κοίλῳ τινὶ τόπῳ.

Further the only finds of appropriate date thus far identified with the courts, the fourth century bronze ballots and dikasts' name plates, have been found in largest numbers near the southwest corner of the Agora. Eleven of the twenty-nine dikast ballots, found during the excavations, are from near the Tholos and the "Greek Building," four are from our southwest area between the Areopagus and the Hill of the Nymphs, and three were found in the intervening area. Of the thirteen bronze dikasts' name plates, four are from this southwest area, and three from the northwest slope of the Areopagus, not far to the east.

The plan of the two buildings, however, does not seem one that would have been specifically designed for a fifth century dikastic court building. The courtyards are both too small to seat a panel of 500 dikasts, the normal number in trials of public cases, although they could easily have accommodated one of the smaller panels of

⁶⁹ Antiphon's speech on the Murder of Herodes was delivered, ca. 417 B.C., at a trial held in a roofed building in the Agora (Antiphon, V, 10-11). Since the case was presumably tried before the Eleven, the building will have been the Parabyston, which was, according to Antiphon as quoted by Harpokration, the court of the Eleven. More than one court building seems to have been standing in or near the Agora in 392 B.C. for Praxagora, *Ecclesiastousae*, line 676, boasts τὰ δικαστήρια καὶ τὰς στοὰς ἀνδρῶνας πάντα ποιήσω. The evidence for the names and numbers of specific court buildings in any given period is slight. For the fifth century, four or five meeting places of the dikastic courts, not including the Heliaea, are attested, but only two or three specific court buildings. Aristophanes, *Vespae*, ll. 1108-1109 (422 B.C.) lists four separate meeting places for the dikasts:

οἱ μὲν ἡμῶν οὐπὲρ ἄρχων, οἱ δὲ παρὰ τοὺς ἑνδεκα,
οἱ δ' ἐν ᾧδείῳ δικάζουσ', οἱ δὲ πρὸς τοῖς τειχίοις

A court building, τὸ καινόν, is also named in the same play, line 120. This may have been the court of the archon or even that πρὸς τοῖς τειχίοις, or again the archon may have held trials in one of the stoas. Thus, the specific court buildings, in addition to the Heliaea, known for the fifth century are the Parabyston (the court of the Eleven), the courts πρὸς τοῖς τειχίοις and τὸ καινόν; and the second and third may be the same. See Lipsius, *Das attische Recht und Rechtsverfahren*, I, 1905, pp. 167-175 for the court buildings attested for the different periods.

⁷⁰ For convenience this evidence, given in *Hesperia*, XVII, 1948, p. 168 and note 21, is repeated here.

200 dikasts.⁷¹ Furthermore the series of small rooms, which form an integral part of the ground plan, serve no known functional purpose in connection with the courts of the fifth century. Some such series of rooms might be suitable for the single court complex, the *dikasteria*, of the next century described by Aristotle ('Αθ. Πολ. 63-68). But the elaborate method of daily sortition of jurors for which the single court complex was needed was not introduced until early in the fourth century.⁷² In the fifth century, when our buildings were built, the jurors were assigned to a panel for the year and knew in advance the court in which they were to serve (Aristophanes, *Vespae*, lines 1108-1109), so there would be no need for such rooms.

Since the plans do not seem suited to the needs of a fifth century law court and since there is still space available for one or more court buildings near the southwest corner of the Agora, if we accept the topographical evidence for their location in this region, it seems best to reserve judgment. If at some future date this region is fully explored and no other candidate for a law court is found the question will have to be reconsidered.

The southern building, however, on the assumption that the Annex was an integral part of it and that it thus had at least ten small rooms, has some features in common with the court complex required for the fourth century jury system as described by Aristotle in the last chapters of his Athenian Constitution. Could the building, whether originally designed for a law court or not, have been rebuilt in the fourth century as the single court complex, the *dikasteria*? It is not possible to reconstruct from Aristotle's text a clear plan of the complex which he had in mind.⁷³ Ten entrances, *εἰσοδοί*, one for each tribe, are certain and the candidates gathered at these entrances for the allotment process. The text seems to imply that most if not all of the meeting places were included in the one complex.⁷⁴ The Poros Building offers possibilities for the ten entrances in its ten (?) small rooms, but does not seem to

⁷¹ The smaller panels of 200 and 400 used in private suits are only attested for the fourth century, but were probably also used in the fifth, Lipsius, *op. cit.*, pp. 136, 142, and Hommel, "Heliaia," *Philologus*, Suppl. Bd., XIX, Heft II, 1927, pp. 111-112. The courtyard of the Poros Building has an area of *ca.* 175 sq. meters, that of the Greek Building *ca.* 115 sq. meters as compared with 314 sq. meters for the auditorium of the Bouleuterion in the Agora (*Hesperia*, Suppl. IV, p. 150).

⁷² Daily sortition was introduced after 388 B.C., the date of Aristophanes' *Plutus*, perhaps in the reform year of 378/7 (Hommel, *op. cit.*, pp. 126-132).

⁷³ See Dow, "Aristotle, the Kleroteria and the Courts," *Harv. Stud. Class. Phil.*, L, 1939, pp. 18-23. Dow's identification of *kleroteria* as allotment machines rather than allotment rooms makes much of the modern literature on the subject obsolete.

⁷⁴ Since the cases for the day were not assigned to the specific courts until after the jurors had taken their seats, § 65, 2 and 66, 1, the possibility of effective bribery if the dikasts walked through the open square with their colored batons would seem very slight. Further, the specific reference to the Heliaea, § 68, 1, implies, in my opinion, a separate place; and a court meeting in the Stoa Poikile, which cannot have been part of the single complex, is named in a record of the late forties of the fourth century: *I.G.*, II², 1641, lines 28-30.

provide sufficient space around the entrances. Further it provides only one meeting place and that too small for the larger panels. As we have seen, the building was rebuilt in the second quarter of the fourth century. This date would be most appropriate for the court complex which was not required until after 388 B.C. On the other hand, the presence of the pyre burial of the middle of the fourth century in the north-west room suggested that the building was not serving any public purpose at that time. Thus, again with this assumption, the difficulties are such that they cannot be ignored until all other possibilities have been excluded.

If the buildings were not law courts, and if the assumption that they are public buildings is correct, one further suggestion may be offered. They might perhaps have served as civic offices for some of the many city officials and commissions. The plan would seem eminently suited to some such use, with each small room assigned to one specific board and the courtyard and corridor used by all. This hypothesis of a common building for several offices might explain why we have so little direct evidence for the offices, such as the *strategoion*, *hipparcheion*, *poleterion*, etc., known to have been in or near the Agora.⁷⁵ Is it then possible that the northern building near the Tholos, housing more than one group of officials, was in fact the building occasionally referred to as the *synedrion* or *archeion*?⁷⁶

HOUSES OF THE FIFTH AND FOURTH CENTURIES

All along the Street of the Marble Workers in the bottom of the valley lay houses of the fifth and fourth centuries. Though some of these suffered considerable damage at the hands of pit-diggers of Byzantine times, the very depth at which they lay served as a protection and some of them have survived in surprisingly good condition. These houses are spoken of as houses of the fifth and fourth centuries because in general they all had two phases: a fifth century phase earlier than the building of the south branch of the Great Drain, and an early fourth century phase when in consequence of the building of the drain most of them underwent alteration or partial rebuilding. It must be borne in mind that all of these houses existed before the drain was built in the opening years of the fourth century, and that the course of the drain was itself dictated by the position of the houses. Thus the various slight bends and curves in

⁷⁵ For the various offices see Wachsmuth, *Stadt Athen*, II, 1890, pp. 344 ff.; Judeich, *Topographie*², 1931, pp. 346, 357, and Kahrstedt, *Untersuchungen zur Magistratur in Athen*, 1936, pp. 296-299. It may be noted that a fragmentary decree in honor of a hipparch, *I.G.*, II², 895 (188/7 B.C.), names the *hipparcheion* in line 6 and then the phrase ἐν τῇ αἰλῇ τῶν — — occurs in line 8, apparently as the place of erection of the stele.

⁷⁶ For a recent discussion of the *synedrion* and *archeion*, see McDonald, *The Political Meeting Places of the Greeks*, 1943, pp. 295-298, where all known references to the *synedrion* in Athens are given. See also *Hesperia*, VI, 1937, p. 215, note 4, where the suggestion is made that *synedrion* may have been another name of the bouleuterion.

the line of the drain are accounted for by the necessity for bypassing houses and buildings which were already in existence when it was made. In order to visualize the layout of streets and houses in the fifth century it is necessary to think away the Great Drain as it appears on the plan, Figs. 1, 5, 7 and to substitute for it the left branch of the Street of the Marble Workers, already noticed, running southward from the little square opposite the court of the Poros Building. There is left a passageway of irregular width, reaching a maximum of nearly five meters between Houses C and L, which gave access to Houses A-B at the west and south, and to Houses J-K-L at the east. The west limit of the street is given by the east fronts of Houses B-C-D, the east by the west fronts of Houses J-K-L. To the south of House L the eastern limit of the street is not fixed; probably it lay parallel to the western, but it disappeared with the building of the drain. Passage farther toward the south by this road was blocked with the building of House A, but no doubt it continued to be used as a way of access to Houses A-B and J-K-L until it was finally blocked still farther north by the building of the drain. Houses C-D, and the houses farther to the north, E-F-G, opened directly from the main line of the Street of the Marble Workers; the Poros Building could be entered from Piraeus Street at the north, perhaps also from the square in the Street of the Marble Workers at the southwest. With the blocking of the southern branch of the Street of the Marble Workers by the drain we must assume that Houses A-B were approached from the south or west, and the houses to the east of the drain from the east. All the houses have been lettered, from south to north along the west side of the drain, A to H, then back from north to south, J to M, on the east side. We will take them up in order, one by one.

HOUSE A

Plan, Figs. 1, 7

Of the southernmost of these houses we could excavate only a corner (plan, Fig. 7); the rest runs under the scarp which supports the modern Apostle Paul Street. This is unfortunate because House A has the best preserved walls and floors in this area due to the fact that the filling and the stratification around it were undisturbed by pits of Byzantine times (section, Fig. 8). We uncovered enough of the room which lay at the northeast corner of the house to secure its dimensions in both periods of construction, and the stratification served to give us an approximate date for the first period.

First Period

The house was built in the bottom of the valley, right across the line of the roadway, effectively blocking it. Access to the house itself was by the road, however, and a door was left in the north wall of the house fronting on it. Since this roadway also carried the drainage from the hills to south and southwest we must assume

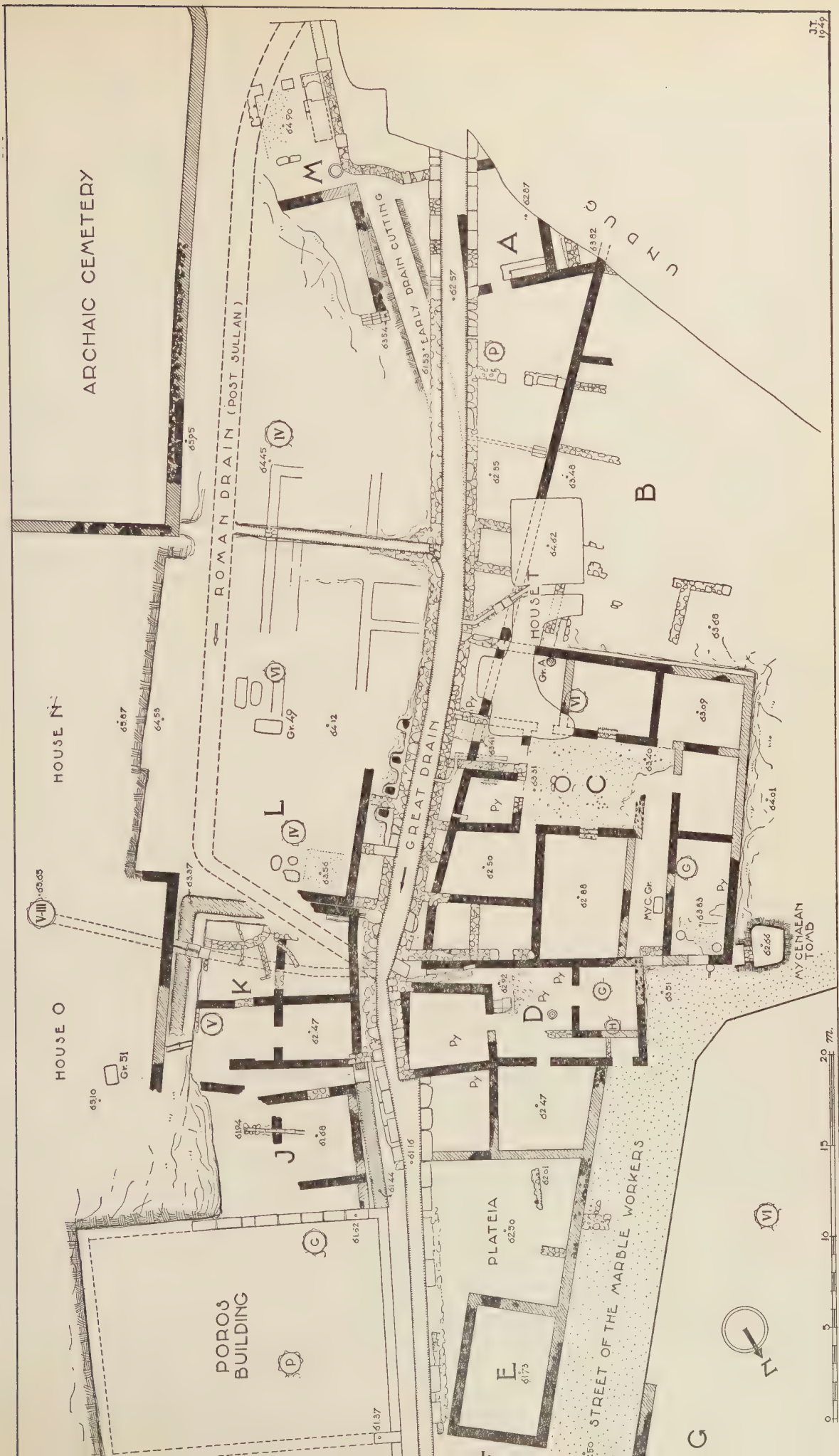


Fig. 7. Plan of the Central and Southern Parts of the Area in Pre-Roman Times. Gr=Grave. Py=Pyre. In the Wells
P=Protogeometric, G=Geometric, H=Hellenistic, others by Centuries.

that when House A was built across it provision had already been made for the drainage by the digging of the deep ditch farther to the east (plan, Fig. 7), which was the forerunner of the built drain (see below, p. 254). It is noteworthy that the east wall of the original House A is approximately parallel to this early drain cutting; it is also impossible that a house could have been built in the natural line of drainage unless the flow had already been diverted to another channel. The problem of the drainage running through the area having been taken care of by a new channel, we

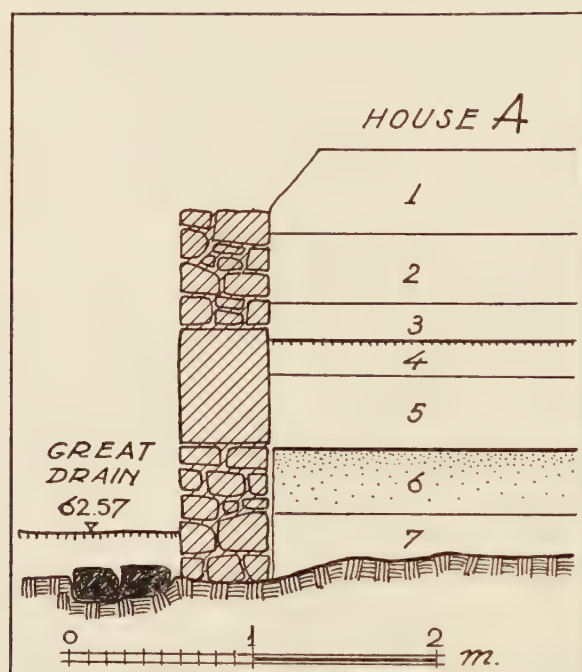


Fig. 8. East-West Section in House A, Showing Drain (left) and Stratification inside House A.

must also assume that the southwestern branch of the Street of the Marble Workers was already in existence to take care of the traffic which had formerly passed up the roadway in the bottom of the valley. Only after such disposal of the drainage and the traffic was this low-lying area available as a building lot.

The long polygonal east wall of House B, fronting on the roadway, was already in existence when House A was built. The north wall of House A was made to abut against the face of the east wall of House B, which no doubt farther to the south served also as a party wall between the two houses. The north wall of House A was not laid at a right angle to the east wall of House B; the two together form an acute angle at the corner. This was probably because the east wall of House A was

laid to take its orientation from the new drain channel at the east. The north wall of House A was carried eastward from House B to a distance just short of six meters; the northeast corner of the house formed a right angle. A doorway 1.25 m. wide was left in the north wall 1.50 m. west of the corner, giving entrance from the roadway (Pl. 65a). The east wall of the original house was demolished when the Great Drain was built, but in the bottom of the drain (Pl. 65b) remained the cutting in bedrock in which it had been bedded, and some of the rough bedding stones of the wall itself below its ground level. The original corner of the house formed a right angle and was strongly built of large limestone blocks, carefully fitted. These remain in place to a height of two courses, where they were incorporated into the construction of the later drain wall. Since the line of the drain wall was not the same as that of the earlier house wall it was necessary to trim the faces of the earlier blocks still in place. At the northernmost edge of the corner the original surface was left, but to the south of that the tooling is very visible where the faces of these blocks were trimmed down to the plane of the face of the drain wall. This tooling was carried down only to the level of the bottom of the drain; below, the original face of the lowest block in part remains as it was exposed in the face of the east wall of the house (Pl. 65c).

The rest of the walls of House A in its first period were built of limestone in a careful rubble construction with blocks much smaller than those at the corner, which was naturally made stronger. The wall and jamb to the east of the door belong to the first period (Pl. 65a); to the west only the lower part of the north wall as far as House B belongs to the first period, and all the upper part to the later rebuilding. An interior wall running southward from the north wall divided the space into two parts, a narrow passage at the west beside the wall of House B, and a room 3.90 m. wide at the east (plan, Fig. 7). Another wall running west from the drain wall at the south served the first as well as the second period of the house; its lower construction is the same as that of the other walls of the early house, clearly a stone socle prepared for the reception of a superstructure of sun-dried bricks. The stone socle thus rose to a height of 0.45 m. above the ground level, which could be fixed both inside and outside the house. We found no trace of a door sill, though there must have been one; the rough bedding course of the north wall of the house carried across the door well below floor level and probably supported a stone door sill of some sort, which may have been removed and reused in the later reconstruction of the house. The floor inside (section, Fig. 8) was made of beaten earth; a thin layer of clean red clay had been laid over an earth filling and smoothed and tamped hard. Probably this floor was renewed by a fresh layer of clay from time to time; we did not find evidence for it here, though we did find such evidence in some of the similar floors above, and the lowest floor as we found it had worn very thin. The sherds from below this floor level are crucial for the dating of the first period of the house. All belonged to the first half of the fifth

century, or were earlier. Two of the most characteristic and identifiable pieces suggest a dating for the construction of the house at about the middle of the fifth century.⁷⁷

A. *Fragment of a Red-Figured Stemless Cup.*
Pl. 66b.

Inv. P 19880. Max. dim. 0.086 m.

Fragment of a heavy-walled stemless cup, the moulded ring foot as on the Euaion painter's cup in New York (Beazley, *Attic Red-Figure Vase-Painters*, p. 531, no. 95; Richter and Hall, *Red-Figured Athenian Vases*, no. 107, pls. 107, 181). Inside, within a narrow reserved circle, a satyr standing right; behind him a staff (?). The style and date are near that of the New York cup noted. *Ca.* 460-450 B.C.

B. *Fragment of a Red-Figured Vase.* Pl. 66a.
Inv. P 17137. Max. dim. 0.075 m.

Fragment from the shoulder of a large closed vase, probably an amphora. Part of a decorative band at the base of the neck preserved at the top. Below, the head of a woman, left, with a kerchief over her hair; in front a hand.

The fragment is assigned by Beazley to the Perseus painter, *Paralipomena* to *Attic Red-Figure Vase-Painters*, p. 383: "add as no. 9." The work of this painter, an early classical mannerist, is dated to *ca.* 475-465 B.C.

Second Period

The second period of the house dates from the time of the building of the Great Drain in the opening years of the fourth century. To the east of House A the ground rises rather sharply toward the Areopagus. Though the natural contours of the time of the first period of the house are no longer visible because they are masked by the east wall of the drain, it is clear that the builders of the drain were forced to pass their channel between this slope at the east and House A at the west. At the north by the corner of the house there was barely room, but the space available so narrowed toward the south that passage was impossible without either cutting back the hillside or altering the east front of House A. The latter course was adopted; the east wall of the house was demolished, as we have seen, and a new one built which served at the same time as a west wall for the drain channel and an east wall for the house. Thus when the drain was built House A was reduced by a long wedge-shaped section, its point toward the north, along the east side. The new drain wall was of peculiar and original construction (Pl. 66e; Fig. 9). It was built of large squared blocks of conglomerate so interspersed with equal areas of polygonal masonry in limestone as to form a sort of checkerboard of alternating and contrasting rectangles. The neatly fitted limestone masonry, often with stacked work at its corners, recalls construction of the fifth century; the large conglomerate blocks must be included among the earlier examples of the use of that material for building, which seems to have become common only in the fourth century. I can find no parallels for this checkerboard pattern of construction except in our own area where another stretch of the west wall of the drain farther to the north beside House F is built in the same way (Pl. 81a). It

⁷⁷ I am indebted to Peter E. Corbett and Miss Lucy Talcott for the identification and attribution of the red-figured pottery.

would seem to be a definite and original style of masonry; a builder merely using what material was at hand might well have laid his big conglomerate blocks as a lower course and built the upper part in limestone. It would seem to require some imagination so to intersperse the materials as to form a checkered pattern. No doubt there was a

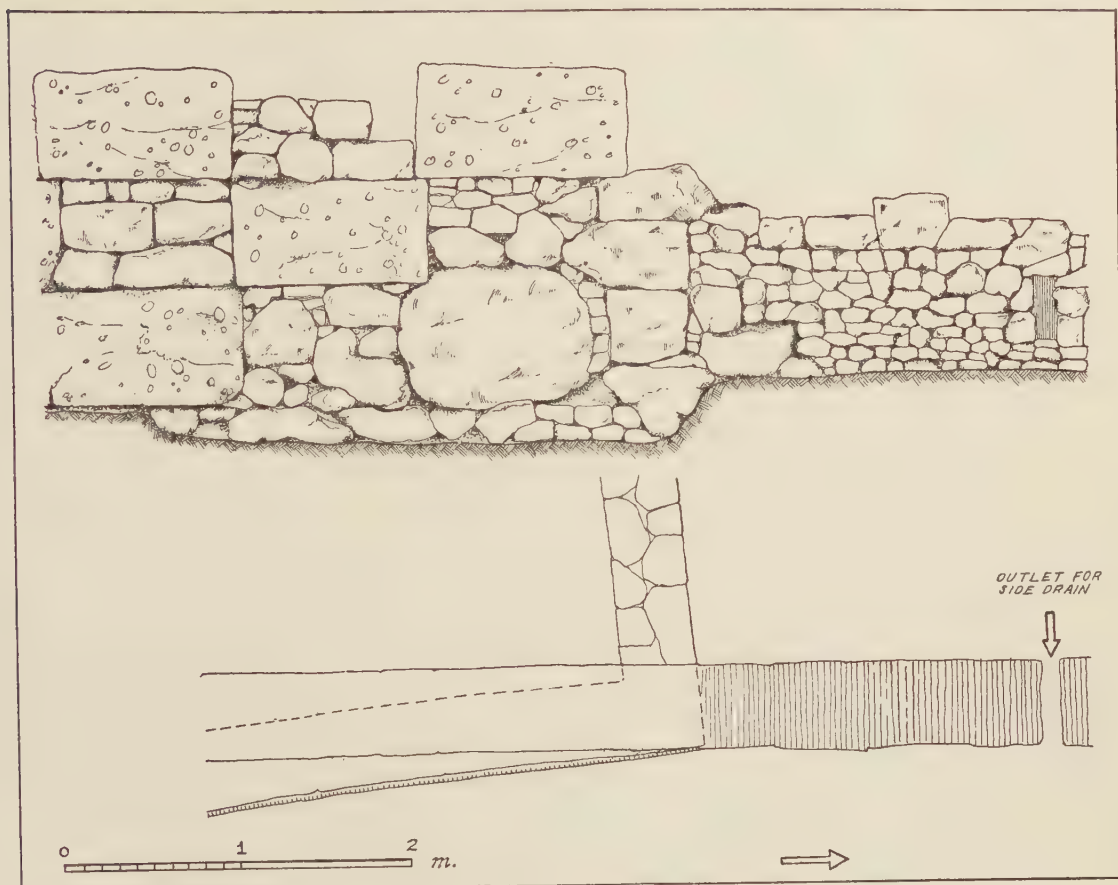


Fig. 9. Houses A and B: Elevation of East Wall of Second Period, and Plan to show Line of East Wall in both Periods.

certain saving of labor in this method of building: the vertical joints of the big conglomerate blocks did not have to be trimmed to an exact fit because the space between them was filled with limestone polygonal work. Since no other examples can be cited elsewhere we seem to have a very local style of masonry, confined to Athens at the turn from the fifth to the fourth century; probably the same mason built both sections of the west drain wall which are in this style.

The wall stands to a height of three courses, ending in a continuous flat surface 0.50 m. wide at the top, no doubt a socle to carry an upper wall of sun-dried brick,

its bottom set 1.60 m. above the floor of the drain, well above any danger of being undermined by water flowing in the channel. The north wall of the house, at least at its east end, seems also to have been carried to this height in stone: the north end of the topmost block of the drain wall is cut not at a right angle to the inner and outer faces, but at an angle to meet the north wall of the house at the corner. The raising of the levels of the stone socles in order to protect the upper construction of sun-dried brick from damage by sudden floods in the drain reflects an awareness of the necessity for a general raising of levels throughout, which was shown inside the house also by the raising of the floor level (section, Fig. 8). A filling was thrown over the floor of the earlier house to a depth of 0.45 m., and its surface covered with a new floor of clean red clay. In the filling under this floor was observed a large number of fine limestone chips which probably came from the trimming on the spot of limestone blocks of the drain wall when it was built. This new floor extended westward unbroken over the old interior wall which had divided the house into two rooms. A new wall was built still farther to the west to serve as the west wall of the corner room, which was thus enlarged to an east-west width of 5.20 m. (plan, Fig. 7). The length of the room from north to south remained the same as before, 6.20 m.; but in the south wall there is a gap in the later construction over the old wall just beside the drain, which suggests that a door was left here. This door, if such it was, was blocked in a still later reconstruction, when the south wall was carried right across it to meet the drain wall.

To the second period of the house belongs also a westward extension into the area of House B. The north wall of House A was carried westward across the front wall of House B, not in a straight line, but with a slight bend where the old and the new construction met. This bend was probably made because the new house took its orientation from the west wall of the drain, on a slightly different line from that of the older house. The southward continuation of the east wall of House B was plundered of its upper courses, which would have projected through the new floor level; of the old wall of House B there remain only the deep bedding stones.

The second period of House A seems to have lasted throughout the fourth century. The clay floor was relaid many times; on one occasion, perhaps in consequence of a flood in the adjoining drain, the floor level was raised by about 0.30 m. when a filling of earth and gravel was thrown over the old floor (Layer 4 in the section, Fig. 8). To the same raising of levels belong the closing of the door in the south wall and the making of a large rectangular pit at the north, beside the doorway to the west. Perhaps at this time, too, the north door was closed; a new room was built outside at the north, which probably belonged to House B rather than to A. The pit extended for 1.95 m. along the north wall (Pl. 66d), slightly overlapping the west jamb of the doorway; it was 0.40 m. in width, and lined at its east and south sides by thin walls of dry rubble. It contained a mass of fragments of coarse pottery, mostly amphoras,

of the fourth century. Its use was not determined; it was made through the latest floor of the house, and deep enough to cut through the earlier floor of the second phase of the house also. In the pit itself and in the filling of both levels of the floor of the second house were found four black-glazed sherds bearing the same graffito, a *kappa*, incised on them (Pl. 66c); these probably belonged to the table service of the house in the late fifth and early fourth centuries and were marked with the initial of the owner, whose name apparently began with a K.⁷⁸ The rest of the pottery from under the floor levels of the second house served well enough to date house and drain: from under layer 5, the floor laid when the house was altered, came sherds of the late fifth century, while from the upper layer the sherds were as late as the middle of the fourth. The three upper layers which appear in the section, Fig. 8, all formed after the abandonment of the house; the lowest of them, layer 3, covered the tops of all the interior walls to north, west and south. The sherds from this layer were late fourth and third century, suggesting that the house was abandoned and its upper parts taken away for reuse elsewhere at some time in the third century. There were no traces anywhere of a violent destruction of the house.

HOUSE B

Plan, Figs. 1, 7

House B, lying to the north and west of House A, was somewhat older. We have noted above that House B was already in existence when A was built against the face of its east wall. House B is less well preserved than A; except for its long east wall beside the roadway the foundations of this house have suffered very badly, in part at the hands of the builders of the Roman house, T, which overlay it, and in part, especially toward the west, from the Byzantine pit-diggers. Again we cannot make out a complete house plan, particularly for the first period; for the second the remains are rather tenuous, but they suggest that the area of House B had been divided between two houses by the time the drain was built.

First Period

The long eastern wall of House B extended for more than 21.50 m. along the roadway, from the corner of House C at the north to House A at the south (plan, Fig. 7). The measurement given was taken from the inner face of the north wall of House A northward; House B extended originally still farther toward the south, though we do not know how much, before its southern end was appropriated in the fourth century by the owner of House A. For nearly half of this extent the wall is covered by House T, but we were able to verify its continuation underneath the

⁷⁸ Inv. numbers, on Pl. 66c, from left to right: above, P 20175, P 17422; below, P 20176, P 20174.

Roman house and to fix its north end, where a large boulder of limestone, well below ground level, lay beside the south wall of House C as a cornerstone for the north end of House B. Along the north side House B shared a party wall with House C;⁷⁹ the foundation of this wall lay in a cutting in the hardpan made as a bedding for it throughout its east-west length. The wall as found is not very well centered in the cutting, lying as much as 0.30 m. off center to the north; possibly it was at some time rebuilt. The western limits of House B were probably the same as those of House C at the north; there were no traces of a continuation of the north wall of House B farther to the west, where the bedrock rises. The western part of the house had been disturbed to bedrock in Roman and Byzantine times, as already noted. The only

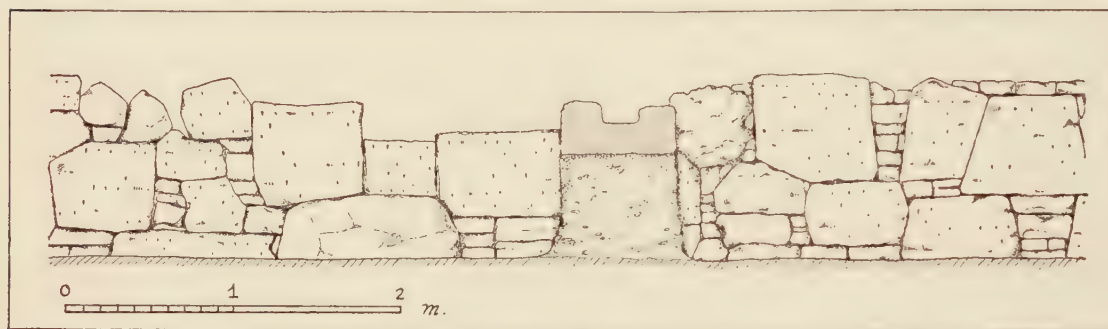


Fig. 10. House B: East Wall, Elevation, and Poros Channel Block of Second Period in Section.

interior wall which could be identified with certainty as belonging to the first period of House B lay near its southern end; it is shown in black on the plan (Fig. 7). At its east end it bonded into the long polygonal east wall, and it rose to the proper height to go with the inside ground level of the earlier house.

The east wall (Pl. 67a; Fig. 10) of the house is characteristic fifth century work, and since we can date it before the middle of the century it is probably characteristic work of the first half of the century. The little temple of Dionysos in the Marshes which lay not far away to the southward was built in exactly the same sort of masonry.⁸⁰ Our wall was built of limestone throughout in a careful polygonal

⁷⁹ The use of a party wall between houses was common in this area; Houses C and D also shared a party wall. The famous episode in which the Plataeans dug through the party walls separating their houses is recounted in Thucydides, II, 3-4.

⁸⁰ *Ath. Mitt.*, XX, 1895, p. 174, fig. 9. It is illustrated only by a drawing, as is the north wall of the peribolos, *ibid.*, p. 165, fig. 3. It is difficult to find parallels for our house walls in publications dealing with Greek masonry. Wrede in *Attische Mauern*, illustrates very few examples of the less monumental constructions; Scranton, in *Greek Walls*, deals exclusively with monumental masonry. Perhaps some criteria for the more carefully built walls of a lesser sort in the fifth century may emerge when more examples like ours have been collected and adequately published.

and rubble style of masonry. The joints of the big polygonal blocks were carefully trimmed and fitted where they met; where gaps were left between them they were filled with neat patches of stacked work. The entire outer face of the wall was tooled to a smooth plane, probably with the hammer. Below its ground level the tooling of the east face stops; the wall was carried to bedrock, the joints still carefully fitted, but the blocks were left with their faces unfinished. This wall served at the same time as a foundation and a retaining wall; the level inside the house at the west was 0.90 m. higher than outside at the east. Probably it was thought desirable to raise the floor levels inside well above the street level at the east, since the drainage apparently ran down the surface of the roadway at the time the wall was built. The stone wall served as a socle for a superstructure of sun-dried brick, finished on top in a surface 0.50 m. wide and flat to receive the bricks. The beginning of the brick construction lay 0.30 m. above the inside floor level and 1.20 m. above the street level outside, as in the case of the east wall of House A, well above the danger of being undermined by flood. The back face of the wall was rough to just below its inner ground level; there the rather heavy foundation which served as a retaining wall narrowed to the thickness of the stone socle for the mud-brick wall above, 0.50 m. The narrowing left a ledge about 0.20 m. wide along the inner face of the wall. The house must have been approached from the street by steps leading up to a door. We found no trace of these in the stretch of wall which we exposed; possibly it lay farther to the north, in the area still covered by House T.

The construction of the wall itself showed the ground level required both inside and out. The stratification, where it was preserved, agreed exactly with this requirement. Inside the house a firm floor covered at the surface with clay lay just high enough to conceal the projecting ledge beneath the good construction of the socle, which was intended to be visible. Beneath this floor the fill contained many small chips of limestone, no doubt left on the spot by the trimming of the blocks for the polygonal wall when it was built. At the east a good road surface lay at the level of the bottom of the tooling on the face of the wall; the filling below this was of sand and gravel, road and drain deposit which had been cut through for the building of the wall. The sherds from below ground level both inside and outside the wall of the house were early fifth century, with some fragments of the sixth. Most useful for the dating of the wall were the ostraka from beneath these fillings: from below ground level outside at the east came two ostraka, both of Hippokrates;⁸¹ and below the inside ground level were found five more, one of Hippokrates, two of Themistokles, one of Kallixenos the son of Aristonymos, and part of a fifth, on which were preserved only the letters ΑΡΙΣΤ[, and which could be attributed either to Aristeides the son of Lysimachos or to Kallixenos the son of Aristonymos.⁸² In any case the ostraka were

⁸¹ Inv. Nos. P 17224, P 17432.

⁸² Inv. Nos. P 17291, P 17226, P 17278, P 17290, P 17225.

all of Athenians who had been voted against in *ostrakophoriai* of the late eighties of the fifth century—the years immediately preceding the Persian invasion.⁸³ Their number, seven, suggests that they were not merely strays; they were still lying about together in sufficient numbers so that we may assume that the fill which included them was used in the house not too many years after the *ostrakophoria* in which they were cast. We have dated House A about 450 B.C.; House B was older, and the ostraka from its filling suggest that it was as much as fifteen or twenty years older. The house may even date from the rebuilding of Athens after the Persian destruction; perhaps a conservative dating would place its construction in the years between 470 and 460 B.C.

Over the street at the east lay a layer of earth 0.30 m. thick, surfaced with a floor of good yellow clay. The filling had evidently been dumped over the street surface all at once in order to raise the level. It contained sherds as late as the middle of the fifth century. Before House A was built (about 450 B.C.) the line of the drainage had been shifted eastward; and with the building of House A the roadway became merely a passage giving access to Houses A-B. We have no evidence beyond the clay flooring laid at about this time that House B was expanded toward the east; perhaps a part of the old roadway was appropriated as a garden or a court, and covered with a good clay floor outside the house proper. This floor was in turn buried under a dump of red earth and dug bedrock 0.30 m. thick, perhaps some of the hardpan dug out when the channel was made for the drain. The sherds from this layer ran as late as the last quarter of the fifth century. It in turn was covered by a dump of earth 0.45 m. thick, which brought the ground level high enough to cover the bedding courses of the west wall of the Great Drain, evidently also a filling thrown in at the time when the drain was built. The sherds from this layer were also late fifth century.⁸⁴

With the building of the Great Drain the first period of House B came to an end; but before passing on to its second phase we may mention an observation made elsewhere: that when the drain was built holes were left in its west wall to serve as

⁸³ Other possibilities for the fragmentary ostrakon are Arist--- Charop--- or Arista- (ichmos?) Timo(kratous): cf. *Hesperia*, Supplement VIII, p. 396. But both of these are represented by a single ostrakon, whereas Kallixenos and Aristeides both fall very happily into the company of Hippokrates and Themistokles. Ostraka bearing the names of each of the four were found in the upper filling of the rectangular rock-cut shaft, which was closed before the Persian sack of Athens; cf. *Hesperia*, XV, 1946, pp. 265 ff. and pp. 271 ff. On Kallixenos, see *Hesperia*, XIX, 1950, pp. 376 ff.

⁸⁴ The building of the drain is dated from filling in three places: in House C, west of House L, and in the deep cutting which was its forerunner and which went out of use and was allowed to fill when the drain itself was built. Reference should be made to these three fillings for the dating of the drain (below, pp. 211-212, 247-248, 255-256). It has not seemed worth while to labor the point by presenting evidence from all along its line, especially from such places as in front of House B where the pottery was very fragmentary and undistinguished. From this filling may be mentioned fragments of stamped black glaze and of lamps of Broneer's type VI.

inlets for the small drains of the houses which already existed to the west. Two such inlets were left in the stretch built in front of House B: one well to the south, only a few meters from the corner of House A, and one at the north, close to the corner of House C. It was not possible to determine whether a corresponding outlet for drainage passed through the wall of House B opposite the northern drain inlet; but at the south there was none.

Second Period

Southward of House C the course of the new drain did not follow the line of the old roadway but diverged on a more southerly course to bypass House A at the east. Thus the east front of House B was separated at the south from the drain by the whole width of House A, 5.80 m., while at the north the distance from house wall to drain was only 1.50 m. This divergence of the line of the drain left a large triangular area open in front of House B and to the north of House A. The southern part of this area was occupied by a new room extending out to the drain wall along the north side of House A; the northern part seems to have remained open.

In order to enclose the new room at the north a new wall was built from the east wall of House B to the drain, 4 m. to the north of the front of House A, and a wall was built on top of the drain wall from there to the corner to House A to enclose its east side. To south and west the walls of the two houses already standing served as walls for the new room. The new north wall was roughly built of limestone blocks, some of them perhaps reused; only its foundations are now preserved. It did not extend merely from the drain to the east wall of House B, but crossed it and continued westward into the house itself. For this reason and because the construction of the drain wall changes at the corner of House A (Pl. 65c; Fig. 9) it seems preferable to assign the new room to House B rather than to House A. Of the east wall only the bedding course remains. It was built over the west drain wall, here of small rubble construction. On top of the small rubble socle was laid a series of rough limestone blocks, trimmed smooth only on their east faces toward the inside of the drain. The upper surfaces and the backs of these are rough; the blocks are longer than the thickness of the drain wall on which they rest, and overhang somewhat at the back. This row of stones was clearly the bedding course for a wall, and it lay about at ground level or just below. The unevenness of its upper surface calls for stone rather than sun-dried brick above, and invites the restoration of a low stone socle to carry an upper wall of brick. A good floor of clay lay to the west at a level where it covered most of the rough bedding course; it was the floor of the room after the building of the drain, and lay at the same level as the first post-drain floor of House A to the south. The room may have been entered by a door in the north wall, though the gap through its foundation which appears on the plan is merely a place where all the foundation stones had been stolen in later times.

The construction of the west wall of the drain changes sharply at the corner of House A, from heavy "checkerboard" masonry to light rubble construction (Fig. 9). North of the new room the drain wall is in large part missing; where we find it well preserved again at the north it is of polygonal limestone masonry. The length of the stretch of drain wall in front of House B is 18.30 m., from the corner of House A to the corner of House C. Some distance from its northern end (5.80 m.) this stretch of drain wall shows a vertical joint throughout the height of its face, which seems to represent a wall corner built when the drain was made and at a point where a wall runs westward from the drain. This wall, of which the east end was incorporated into the construction of the drain wall, can be traced westward to a distance of more than 7.00 m. where we picked up its end again to the west of the Roman house T; and it suggests that in its second phase the area of House B was divided between two houses, one with a frontage of 5.80 m. on the drain at the north, the other with a frontage of 12.50 m. at the south. To the southern house belonged the new room added in front of House A (unless it should be assigned to House A) and the westward continuation of its north wall. One other wall also belonged to this house, running westward from its east wall 3.10 m. to the north of the other. All these walls were found broken off toward the west, and they can offer little in the way of a suggestion for the house plan. The area to the north of the new room in front of House A, between the drain and the east front of House B, seems to have remained open as a sort of recessed courtyard. The drainage from the house at the west was carried across it in a line of poros blocks with a channel cut in their upper faces. The line was laid to span the gap between the east front of the older house and the new drain; one of its blocks, the first at the west (Pl. 67a; Fig. 10) was found in place in front of the house wall, and three others lay to the east in a tumbled and fragmentary heap. The channel apparently had been laid at the time when the drain was building; the block in place rests on the filling of dug hardpan thrown over the clay floor in front of the earlier house, mentioned above as probably a dump of the material dug out when the drain channel was made. The thickness of the block was 0.45 m., just that of the layer of gravel and earth thrown in behind the drain wall after it was built in order to level off the area. Apparently the line of poros blocks carrying the water channel lay with its top at the surface of the new floor. The older House B stood right beside the roadway, and though we found no arrangement for the drainage of its time there can be no doubt that it sent its waste water directly into the street. It is not unlikely that the new poros drainage channel was laid on the line of the drainage of the older house.

The northern part of the new house was extended eastward so that its east wall could rest on the west wall of the drain. There were two rooms at the east side; a cross wall runs westward from the drain, leaving a room 3.40 m. wide at the north, and a narrower one to the south. In the southern room an attempt was made to rectify the angles at which the north and south walls met the drain by building a foundation

beside the back of the drain wall, thick at the south and thin at the north so that the corners of the room could be right angles (Pl. 67b). These rooms may have been closed at the west by a wall of which we exposed two short bits under House T. This wall certainly belongs to the later phase of House B because its orientation seems to be that of the new east (drain) wall rather than that of the old house wall. Beside its north end at the west was found a rectangular rubbish pit lined with walls crudely constructed of dry rubble, similar to the one in House A. The sherds from this pit were of the fourth century; it contained also some animal bones and cinders, perhaps from a kitchen dump. Two objects found in it are of interest: a fragment of a dikast's ticket, and a red-figured sherd.

1. *Bronze Dikast's Ticket*. Pl. 67c.

Inv. B 847. P.L. 0.026 m. W. 0.022 m.

Both ends broken off; at the lower right a rectangular countermark, stamped: owl right, head turned to face. Two lines:

--- ΛΕΙΔ ---
 --- ΡΡΙΣ ---

Part of the ticket of [---] kleides; the demotic may have been Κυθήρρι(ο)s or Φρεάρρι(ο)s.

2. *Fragment of a Red-Figured Stemless Cup*. Pl. 67d.

Inv. P 19537. P. H. 0.022 m.; max. dim. 0.056 m.

The profile of the foot is near that of the incised cup shown below (Pl. 72f) but slightly coarser; the kerchiefed head recalls the lid, Pl. 72b, c. Outside, a trace of red-figured decoration, probably from a rough handle-palmette, remains. End of the 5th century B.C.

A few meters to the west of the pit and the wall beside which it lay was found another bit of wall foundation running north-south and apparently parallel to the old east house wall. At its south end this stretch returned toward the east and west, about on the line of the wall dividing the two east rooms of the later house, T. All the filling around these bits of wall had been disturbed in Roman times, and we got no evidence on which to assign them to the first or the second period of the house. Their orientation suggests that they belonged to the original House B, but probably they were reused in the later rebuilding.

The end of a long drain channel running into the Great Drain from the southwest was uncovered between the drain wall and the Roman house. It was rather carefully built with parallel walls of dry stone covered by tiles and flat slabs. It belonged to the later period of House B; perhaps it conducted water to the drain from the court of the northern of the later houses. The inlet hole left in the west wall of the drain when it was built was probably left where it was because the main line of drainage of the older House B ran along its northern limit; the subsequent rearrangement of the house made necessary the diagonal line taken by the house drain to find the inlet into the Great Drain.

The size of House B, more than 21.50 m. in length (we do not know its full southward extent) and the careful masonry of its east wall at first suggested that we

had the remains of some large enclosure, perhaps a sanctuary, rather than a private house. The later phase, however, when it was apparently divided between two private dwellings, disproved this theory.

HOUSE C

Plans, Figs. 1, 7, 11.

House C, which lay to the north of B, is the most intelligible of all the houses beside the drain. Though it had suffered considerable damage from the digging of pits in Byzantine times, especially at the west side, and though its southeast room remains covered by House T of Roman times, it is possible to trace its complete plan, and to follow its history through three phases from before the middle of the fifth century to the latter half of the fourth.

To the north of House B the next house also fronted on the roadway which passed by at the east before the drain was built. The east front of House C along the street continued the line of the east side of House B without any deviation as far as the northernmost room of the house, where there was a slight bend toward the north. To south and north the house shared party walls with Houses B and D respectively. At the west, part of the outside wall is preserved; the rest was stripped in Byzantine times, but the cutting in bedrock in which it was set fixes its course absolutely. The northwest corner of the house opened from the Street of the Marble Workers at the bend in its course from southwest to west; House C was apparently always entered from this street rather than from the roadway to the east. The orientation of the house and its limits in three directions, to south, east and north, were set by three conditions which had to be taken into account in laying out the house: the existence of House B to the south, the line of the roadway at the east, and the corner of the Street of the Marble Workers at the northwest. Thus pre-existing conditions imposed on the planner three limits for his house; he was free, as far as we know, to fix only the western line for himself. The northern and southern limits of the area were not parallel to each other. The planner, having fixed the desired western limit of the house, laid its west line in such a way as to divide the discrepancy at the corners. The west line of the house was laid at an angle of ninety degrees to neither the north nor the south wall but on a course which made both corners equal, forming slightly obtuse angles of about ninety-six degrees. Thus the house had no ninety degree angles in its plan. The east side of the house was longer (18.40 m.) than the west (15.90 m.) and the north side longer (17.10 m.) than the south (14.40 m.).⁸⁵ Space was made for the west side of the house by cutting back the hillside which rose toward the west.

⁸⁵ None of these dimensions represents an even number of feet on the Attic-Euboeic standard suggested by the stone wall socles which were 0.45 m. thick, presumably to carry bricks measuring one and a half feet on a side. Here again the house plan seems to have been influenced by the pre-existing limitations of the plot.

First Period

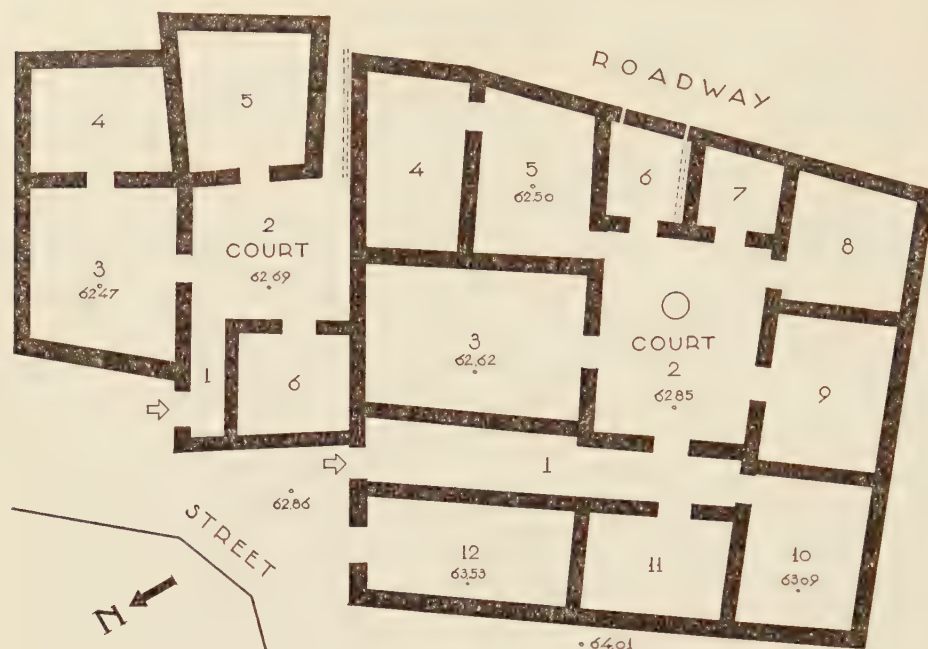
Within the rather irregular building lot the house was laid out on a plan of central courtyard surrounded by the various rooms. The court was not laid exactly at the center but rather toward the south, leaving space at the north for the larger and more important rooms. It was likewise set closer to the east than to the west limit of the house, probably for two reasons. In the first place, the entrance to the house was from the Street of the Marble Workers near its northwest corner, and space had to be left for a passage from the outside door to the center of the house and the court, from which most of the rooms opened; in order not to reduce by too much the width of the rooms at the west the court was shifted eastward. This was compensated at the east by placing what were probably the kitchen and bathroom, small rooms both, to the east of the court, where their drainage could be carried directly into the street drain. The rooms to north and south of the kitchen-bathroom complex were not squeezed so far toward the east by the court; by extending them westward to overlap the east end of the court by about a meter doorways could be made to give them direct access to the court.⁸⁶ In its proportions the court reflected the irregularities of the house itself: its east end was about half a meter wider than its west and there was a slight discrepancy between the length at north and at south. Measured across its central axes the court was 6.25 m. long and 5.00 wide. We were unable to determine whether the well in the court went back to the first period of the house; probably it did.

The house was entered from the street through a long passage leading to the court. The two rooms at the southwest corner of the house opened from this passage; all the other rooms, with the exception of those at the northeast and northwest corners of the house, opened directly from the court. They have been numbered on the plan, Fig. 11, 1 for the passage, 2 for the court, and the rest clockwise around the house, starting from the north, 3 through 12. The lines of the interior walls which divide them carry through the house, though with some slight irregularities. The walls which divide off the southern and western rooms run straight through, though they are not absolutely parallel to the outside walls of the house. The walls to north and east are less regular; probably an attempt was made in the case of each wall to adjust to the irregular outside lines of the house. We may take up the rooms one by one, noting anything of interest or which needs discussion in the case of each.

Room 1, the passageway, was about 2.00 m. wide; it gave access from the street not only to the court at the center of the house, but also direct access to rooms 10 and 11 which did not open from the court. Thus it was not only a way of access to

⁸⁶ The southeast corner room, 8, is still covered by House T; its doorway is restored by analogy to that of Room 5. A small piece of the wall between rooms 8-9 has survived in the bottom of the Byzantine pit to the west of House T.

HOUSES D·C V CENTURY PRE-DRAIN



HOUSES D·C' AFTER MID. IV CENTURY

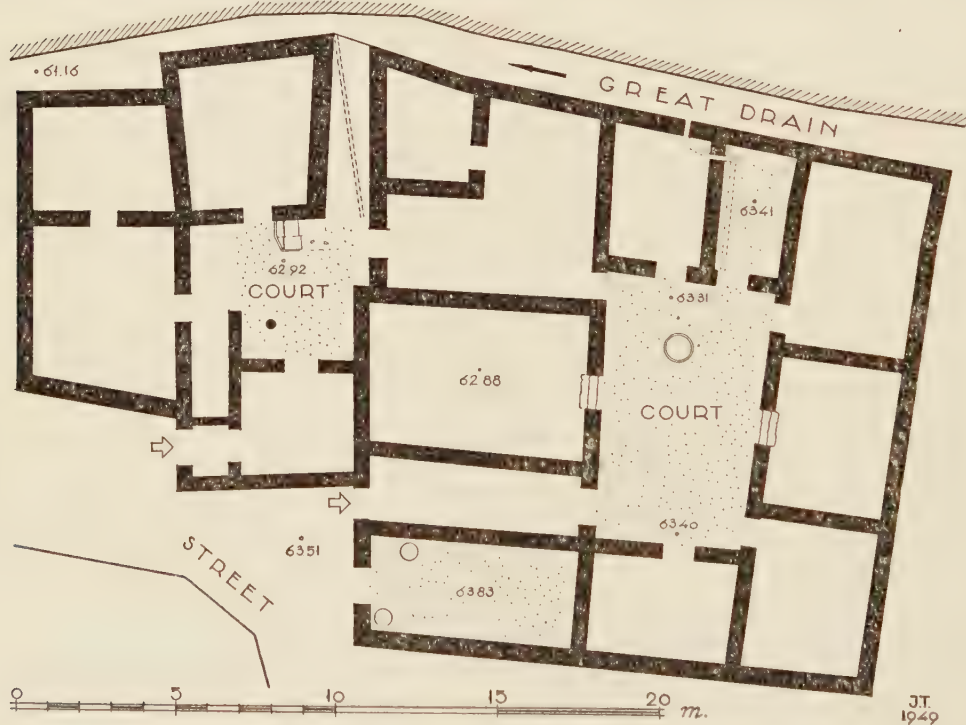


Fig. 11. Houses C and D: Above, Plan of Fifth Century Pre-Drain Phase.
Below, Plan in the Later Fourth Century, after the Alterations of the
Middle of the Century.

the house from outside, but also a link between the rooms inside the house. The street door at its north end is missing and the remains of the wall which divided it from Room 3 at the east are tenuous, but enough remains to indicate its line. The passage was slightly narrower at its south end than its north; the line of its east wall was apparently taken from that of the west wall of the court. This long passage which borders the court and carries through to one extremity at least of the house might be described as a *pastas*, though it lies to the west rather than to the north of the court, and was divided from it by a wall rather than a colonnade.⁸⁷ The position of the corridor was dictated by the position of the house with reference to the street, and it may better be called the *prothyron* of the house than the *pastas*.

Room 2, the court, has already been noticed in some detail. There was certainly no space for a peristyle around the court though whether there were columns along any one side we cannot be sure since the court of the first house is covered by the floor of the third. Two or three columns along the east side of the court, to make a roofed porch in front of the doors to Rooms 5-8, would not be inappropriate, and they may have existed. Such a porch, however, would have cut off some light from Rooms 6-7 and the court would have been reduced to a small area of nearly equal length and width. In the later periods of the house the court was apparently considered not big enough as it was, for it was lengthened westward by including the southern part of the corridor, 1. This was almost the only major alteration made in the house plan, and it is probable that if a colonnade had existed at the east end of the court in the first house it would have survived in the later phases. On the whole we should probably reject the idea of this colonnade, attractive though it may seem in some ways.⁸⁸

The court of the first house had an earth floor which was probably drained toward the east through Room 6: the floor of the latest period of the court was made with a definite slope toward the east. Along the south side of Room 6 part of a drain of inverted roof tiles was still in place, running westward at some depth below the floor. As the inlet for side drainage left in the west wall of the Great Drain when it was built lay opposite this drain, we may assume that this was the main drain of House C and probably drained the court. Room 6 had another drain of its own near its north wall and at a higher level than the other. It will be noticed on the plan that the floor level of the court was slightly higher than that of the rooms to north and northwest, even in the earliest phase of the house. This fact is difficult to explain,

⁸⁷ *παστάς*: "at Olynthus means the large open corridor to the north of the *αὐλή* and south of the three or four living rooms which open on it from the north." Robinson, *Olynthus*, XII, pp. 466-467. A typical Olynthian house plan with *pastas* and *aule* is A-viii-8, plan *ibid.*, pl. 26.

⁸⁸ In the immediate vicinity of Houses C-D two stone bases for wooden columns, similar to the base still in place in House D, were found in later fills or built into later walls. They may have been stolen from House C or D, or both; their dimensions differ between themselves and from those of the base in House D. One is of poros, the other of limestone.

since the court was open to the sky and presumably collected much of the rain water from the roof of the house; and this made an outlet for drainage from the court all the more necessary. Stone thresholds, now missing, probably served to prevent water from the court from flowing into the rooms beside it. We found it difficult to believe at first that the court could have had a floor higher than those of the rooms around; but the discovery of beddings for steps leading down from the court into the room at the north, 3, in the third period of the house seemed to clinch the matter.

Room 3 at the north was the largest room in the house and occupied the best position, facing southward to the court. It was therefore probably the *andron*, the men's sitting room or dining room, though we found no trace of any change in the floor surface for the placing of couches at a higher level around the sides, as was common at Olynthus.⁸⁹ The room was irregular in shape, with no two walls parallel; it measured on its central axes 6.60 m. from east to west and 4.45 m. from north to south.

The area at the corner of the house was divided into two nearly equal rooms, 4-5, the latter opening directly from the court, the former accessible only through Room 5. The door between the two rooms has been restored where it is on the plan (Fig. 11) because the door to the small corner room of the later house must have been in its south rather than its west wall, and the place of the doorway probably remained constant.

We have already noticed the two drains in Room 6, and suggested that it was the bathroom of the house. The northern of the two drains (Pls. 68a, 69b) passed under the east wall of the house just at the level of the street to the east, as well as that of the floor of the room itself. The drain of inverted roof tiles was probably embedded in the surface of the floor and served to drain the room. As this was the only room in the house which had its own drain we take it to have been the bathroom, though it was floored only with clay. The next room to the south, 7, may have been the kitchen. Room 8 at the southeast corner of the house is entirely covered by the Roman House T, and it was not excavated.

The south room, 9, was the largest in the house after the *andron*, 3. It measured 3.70 m. in width from north to south by 4.50 m. in length. Twenty loomweights and a whorl found overlying its floor suggest that this was the room in which the women did their weaving and other work. This room, and the two to the west, 10 and 11, suffered badly at the hands of the Byzantine pit diggers and only small patches of their floors were preserved.

Room 12 at the northwest corner of the house fronted on the Street of the Marble Workers and had a street door of its own, of which the western jamb is still preserved, together with later arrangements for carrying waste water from the room

⁸⁹ Robinson-Graham, *Olynthus*, VIII, pp. 174 ff.

out into the street drain. The floor level of this room was considerably higher than those of the other rooms of the house, and in the later period at least provision was made for a separate water supply—a well in the northwest corner and a cistern near the east side. Taking these factors into consideration we have thought of this room as unconnected with the rest of the house, perhaps a room which could be rented out as a shop fronting directly on the street. Its position made it of greater value than the other rooms, and we shall see reason to believe that it outlived the rest of the house by some years, perhaps simply because its frontage on the street made it valuable as a shop.

We have now been right around the house, room by room, noticing the features of each that are of interest. The total number of rooms was twelve, counting in corridor, court and shop. The house was a sizeable one; its dimensions, though irregular, compare rather closely with those of the houses at Olynthus, which were laid out regularly in accordance with a fixed town plan.⁹⁰ Many of the houses at Olynthus had a second storey; this is usually shown by the lowest step blocks of stone of the stairways leading upward.⁹¹ No trace of any such step block remains in our house, but its absence does not preclude there having been one, though we might be hard put to it to suggest a suitable place for the stairs. The lowest step block could have disappeared as completely as have the threshold blocks of the doors leading to the street and from the court to the various rooms. The thresholds must have been sizeable blocks: the door from the court to Room 3 was 1.10 m. wide, that to Room 9 was also 1.10 m. wide. No doubt these blocks were raised and reused in the successive rebuildings of the house, and finally carried away for reuse elsewhere when the house was abandoned after the middle of the fourth century.⁹² The walls of House C were just as thick and as strong as those of the houses at Olynthus,⁹³ and therefore perfectly capable of carrying a second storey; but whether one existed or not we cannot say with absolute certainty.

The walls were of sun-dried brick laid on stone socles 0.45 m. thick; this seems to have been the standard thickness for house walls at the time, one and a half Attic-Euboeic feet, as already noted in House A. The socles of the interior walls seem to have been very low, only 0.15 to 0.20 m. in height; but little of the original construction of House C was left, partly because of the later rebuildings and partly because the foundations were in large part stripped for reuse elsewhere when the house was

⁹⁰ *Olynthus*, VIII, pp. 29 ff.; and pp. 33 ff. The blocks were laid out to contain ten houses each sixty feet square: a little more than 17.50 m.

⁹¹ *Olynthus*, VIII, pp. 271 ff.

⁹² The level of the court, higher than that of some of the rooms opening from it, would seem to require some sort of stone thresholds in the doorways, to serve at least as dams and prevent water from flowing into the rooms.

⁹³ *Olynthus*, VIII, p. 277. The adobe walls of Olynthian houses uniformly measure from 0.40 to 0.50 m. in thickness.

abandoned. No complete or even partially complete mud bricks were found; though the house was in large part covered by a mass of earth which had obviously once been mud brick, the individual bricks had dissolved. One corner was found, giving the thickness of the bricks, 0.075 m. They seem to have been flat and rather thin; probably they measured a foot and a half square.

The outside wall at the east seems to have been built of squared poros blocks and limestone. In front of Rooms 6-7-8 some of the original poros blocks are still in place, below ground level; they seem to have formed a bedding course for polygonal construction in limestone above. Over the rest of its extent as far northward as Room 4 the east wall of the house is represented by a mere tumble of small stones in the plundered wall trench, or by the trench itself stripped clean (Pl. 68b). The east wall of the first house was taken down when the second one was built, and doubtless much of its material was reused. The north end of the wall beside Room 4 not only had a slightly different orientation from that of the rest of the east wall, but it was also of different construction: rough limestone blocks stacked together without careful fitting at the joints. The corner of the house, however, was quite definite and clean, with a return toward the west (Pl. 68c). The northeast corner of House C was separated from House D to its north by a narrow alley or passage, probably open to the sky, through which a drain of inverted roof tiles carried the water perhaps from the roofs of both houses and probably from the court of House D as well.

There is little evidence to show how the house was roofed. A few fragments of roof tiles overlay the mass of dissolved mud brick and probably belonged to the latest period of the house, which therefore had a tiled roof, as might have been expected.⁹⁴ Since at the south the house shared a party wall with House B, and at the north also with House D, over all the central part of its extent (beside Rooms 2 and 6 of House D) we should assume a roof with an inward pitch toward the court. To the east a roof with an outward pitch would get rid of the rain water into the street; but toward the west a roof pitched outward would carry the water down to an outside slope from west to east, toward the house, set into a cutting in the hillside. At three sides then—to north, west and south—it seems best to assume a roof pitched inward toward the court, and the east side probably followed suit. The north side was deeper than the others, and some special arrangement may have been necessary at the corners.

The first period of House C is difficult to date. Its floors were of clay like those of House A; but House C in large part overlay the old natural stream-bed and road of Geometric times, and wherever cuts were made through the floor of the first house in order to verify its date, we came on the gravelly Geometric fill immediately beneath the clay floors of the house. Not much more helpful was the well in Room 9 (plan,

⁹⁴ Because the plan of the house remained essentially the same throughout its history, it seems safe to assume that the uses to which the rooms were put, the arrangement of the roof etc. remained constant.

Fig. 7); it was earlier than the house, and might have had to be filled when the house was made, but it had been filled long before the house was planned and it produced nothing that could be dated later than the sixth century. The layout of House C beside B, sharing a party wall and continuing the line of the east wall without deviation suggests that House C was contemporary or very little later than B. It was very likely already standing when House A was put up, else the builder of A would not have been forced to occupy the less desirable space in the old roadway at the bottom of the valley. A bit of the west wall of House C which is still preserved is built of large blocks of limestone carefully trimmed and fitted, the spaces between filled with stacked work (Pl. 68d); it is reminiscent of the early fifth century stretch of wall, C, at the west side of the archaic cemetery.⁹⁵ On the whole it would seem safe to date House C before the middle of the fifth century.

Second Period (Plan, Fig. 11)

The building of the Great Drain was the occasion for various alterations in the house of which we have described the plan. We have noticed that to the east of House B the lines of drain and house front gradually converge toward the north, leaving a triangular open space to the north of House A. The east front of House C continued the line of the front of B and presented an obstacle to the continuance of the drain on its own line; in consequence the drain began to bend slightly northeastward at the corner of House C, finally itself taking the line of the house front and running parallel to it over the greater part of its extent. The builders of the drain did not merely follow the front line of House C; they also respected its ground level, and they left the inlet for side drainage from the house opposite its main drain in Room 6 (Pl. 69a). The rough bedding courses of the west drain wall were carried to just below the outside ground level of House C; above that the drain wall was built with a good face toward the west and toward the house to a height of 0.75 m. (Pl. 69b).

The new drain wall over most of its course lay 0.80 m. to the east of House C. The owner of the house took advantage of the opportunity to enlarge his house by building a new east wall on top of the west drain wall. He was more fortunate than the owner of House A, who had lost a long wedged piece of his house along its east side; by taking the drain wall as the line of his new east front the owner of C was able to add a strip about 1.25 m. wide—the thickness of the old wall, 0.45 m., plus the strip between house and drain, 0.80 m. wide—to his house all along its east side. All the east rooms of the house, Rooms 4-8, were thus increased by that much.

This alteration took place at the time when the drain was built and immediately thereafter. This is proved at the north, in front of Rooms 4-5, where there was a slight anomaly. A glance at the plan will show that the east room, 5, of House D

⁹⁵ *Hesperia*, XX, 1951, pl. 34b.

at the north projected about a meter farther eastward than did the front of House C. The drain, then, in order to bypass this projecting corner of House D, had to swing still farther from its former line toward the northeast. This slight bend was begun to the south just in front of the wall separating Rooms 4-5 of House C. At this point, too, the construction of the drain wall changed: at the south it had been polygonal work in limestone over its whole extent in front of House C; here it changed (Fig. 12)

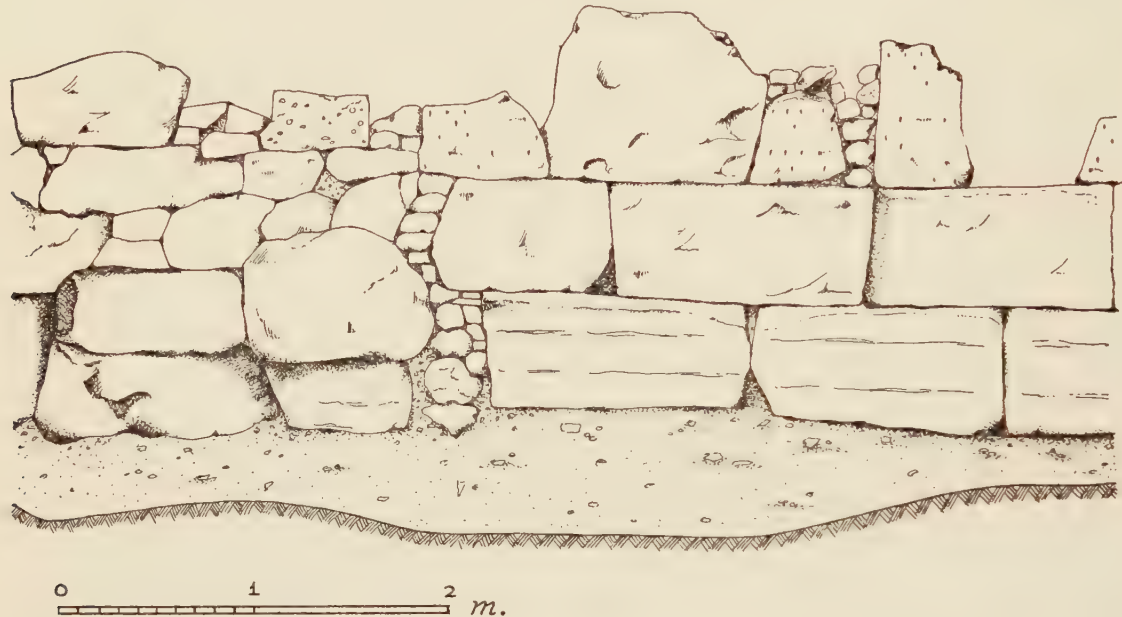


Fig. 12. Elevation of West Drain Wall in front of House C, Rooms 4-5, Showing Change of Construction.

to polygonal limestone blocks bedded on poros. One would like to think, though it cannot be proved, that the poros blocks of which this part of the drain was built had been taken from the foundation of the old east wall of House C, in which three poros blocks may be seen still in place, and reused in the drain wall. Further, at this point the old internal wall separating Rooms 4 and 5 of House C was extended eastward and bonded into the back of the drain wall at its east end, perhaps to give the west wall of the drain more stability at its bend. All the area in front of Rooms 4-5 of House C had to be dug out in order to build the eastward extension of this internal wall as far as the drain. In the northeast corner of Room 5 we found the trench cut when the wall was extended; the filling in it had been thrown in on the completion of the extension, which bonded into the back of the drain wall and which therefore must have been made when the drain was built. This filling was of greenish sand and quite unlike the road gravel in front of House C farther to the south. In all probability

it was some of the deposit of the older drain in the road, dug out when the new channel was made and reused to fill in behind the new drain walls. A mass of sherds was found in this filling, of which six fragments, selected because they are characteristic, are presented here. Thanks are due to Peter Corbett for examining the pottery from this fill and selecting the pieces. The following description of the pottery and the conclusion as to the date of the filling were written by him.

1. *Fragmentary Red-Figured Lebes Gamikos*,
Type B. Pl. 72.

Inv. P 17946. H. 0.135 m. Diam. as restored, 0.124 m.

The mouth and about half the body restored. One side of the figured decoration survives. In the centre is a wreathed woman, seated to left in a chair; she wears a Doric chiton and a himation wrapped round her waist and legs; her raised right hand holds a casket. Before her is another woman, in a Doric chiton; she stands frontally, her arms outspread, and looks toward her mistress holding an alabastron in her right hand. From below the handle to the left of her a Nike flies toward the centre of the scene, bearing two torches. Behind the chair is the lower part of a woman to left; below the handle to the right of her is another Nike, also flying toward the centre and carrying a patterned scarf, the lower end of which is preserved. On the shoulder, tongue pattern. Relief contour for the chair and the faces of mistress and maid.

2. *Fragmentary Red-Figured Pyxis-Lid*, Type B. Pl. 72.

Inv. P 18896. P. H. 0.077 m.

About a third of the wall and part of the top are preserved. Domed top; projecting, rounded rim on the upper surface of which is a groove. On the wall are vertical zig-zags, between two glazed lines. On top, preserved of the medalion, the start of a human neck and the point of the chin. No relief contour; streaky black glaze within.

Other similar lids make the decoration of the top intelligible. Compare Pl. 72, 7, a fragmentary example from an Agora well: Inv. P

18344. Diam. 0.115 m. A single piece preserves the top and part of the wall; some chips are missing from the top, which is slightly domed. In the centre is a hole, pierced before firing. On the top is a female head to left, with the hair bound in decorated sakkos. The central hole presumably held a bronze handle, which would also serve as her earring. Dull glaze; no relief contour; dull glaze wash within. In front of the nose the background has not been completed.

There can be little difference in time between our No. 2 and this lid which comes from the same well-deposit of the last quarter of the fifth century as that which produced the ostrakon of Hyperbolos and the two red-figured oinochoai illustrated in *Hesperia*, XVII, 1948, p. 186, fig. 8, pls. LXVI, 3, LXVII, 1, 2. Compare also *A.R.V.*, p. 760; painter of Florence 4217, Nos. 1 and 2.

3. *Red-Figured Stemmed Kylix Fragment*.
Pl. 72.

Inv. P 18897. Max. dim. 0.096 m.

Two joining pieces give part of the wall and floor. I. Outer border, meander and cross-square, with large dots in the corners. Within, the lower left corner of a piece of drapery. On the outside is part of the handle-ornament. No relief contour.

Extremely close to the vase figured in *Hesperia*, Supplement IV, p. 129, fig. 96, which is there dated "About 410."

4. *Fragmentary Black-Glazed Ribbed Stemless Cup*. Pl. 72.

Inv. P 18913. H. 0.049. Est. diam. 0.140 m.

Much of the rim and wall is missing, with both handles. Flaring lip; ribbed body, the ribs

ending above in semi-circular arcs. Moulded ring foot, the moulding consisting of two neatly rounded equal members. Underside moulded, and decorated with glazed zones. Impressed decoration within.

For the form, compare *Hesperia*, XVIII, 1949, Pl. 86, 35; for the impressed decoration, *ibid.*, Pl. 88, 143; both vases are from deposits of the last quarter of the fifth century.

5. *Fragment of a Black-Glazed Stemless Cup*. Pl. 72.

Inv. P 18915. Max. dim. 0.063 m.

Two joining fragments give part of the floor and rounded ring foot. In the center of the floor is a single impressed palmette, around which are two zones of palmettes separated by rings of ovules. The motifs are unusually large and somewhat clumsy, but the form of the cup and the originality of the impressed decoration

preclude a fourth century date. Good black glaze all over.

6. *Black-Glazed Stemless Cup*. Pl. 72.

Inv. P 18914. H. including handles, 0.055 m. Diam. of rim as restored, 0.144 m.

One handle and parts of rim and wall restored. The cup is unribbed, but the form resembles that of No. 4. Three scraped grooves on the lower wall. Moulded ring foot. The underside is moulded and decorated with glazed zones. Within, incised rays and petals, around which is a hatched zone. Glaze fired grey and brown in places.

The nature of the incised decoration suggests that the cup can scarcely be later than the twenties of the fifth century; for the hatching, compare *Hesperia*, VI, 1938, p. 52, fig. 32; see also *Hesperia*, XVIII, 1949, pl. 89, 146, and the discussion on pp. 322-323.

The material published above consists of the significant red-figured pieces from the deposit and three representative examples of the black-glazed ware. The lebes is the earliest of the figured vases and, from its style, is to be dated around 430. The kylix fragment seems from the parallel quoted to belong to the years around 410 B.C., and for the pyxis lid a date within the last quarter of the century is indicated. The black-glazed pottery agrees with this dating; in addition to the three pieces Nos. 4, 5 and 6, fragments from vases of the forms current during the last quarter of the century were also discovered; note especially two skyphoi which show the same degree of development as examples from an Agora well-filling of the same period (*Hesperia*, XVIII, 1949, pp. 319-20, no. 27, fig. 2, pl. 85).

It will be noticed that the latest piece from this filling can be dated around 410 B.C. We have dated the building of the drain slightly later than this, in the opening years of the fourth century, because the sherds from another crucial place run slightly later than those from here (see below, pp. 255-256). We must date the alterations made in House C at the same time.

These alterations did not involve any serious changes in the plan. The east wall of the older house was taken down and a new wall, probably of sundried brick, was built on top of the drain wall which ended in a continuous flat surface to receive the brick superstructure. This flat surface is visible as a conspicuous horizontal line in the back of the drain wall (Pl. 69b); the stone construction above it apparently belongs to the third period of the house. The top of the stone socle left to receive

sun-dried bricks lay 1.80 m. above the bottom of the drain—apparently a height considered safe enough at the time. The floor levels of the house were raised throughout; in Rooms 5 and 6 the floors of the second period of the house carried unbroken over the line of the foundation of the east wall of the older house. The other changes and alterations, some necessitated by the construction of the east side of the house and others made independently, follow.

All the east-west walls at the east side of the house, both internal and external, had to be extended eastward to meet the new east wall. It is amusing to note that with two exceptions where new walls were built, the extensions took a line at a right angle to the drain wall instead of continuing that of the older house wall straight through. Thus the outside wall at the south flares slightly outward at its east end, because the added piece was not made as a straight extension of the old wall. It was made when the drain wall was made and bonded into its back face; apparently the masons who were building the drain made a spur running west from it at a ninety degree angle to the new drain wall and then ran it westward to meet the older house wall. The lighter interior wall between Rooms 5 and 6 was not bonded into the drain wall; its rubble foundation nevertheless was laid at a right angle to the drain wall and extended as far as the face of the old east wall of the house to meet the older partition wall at a slight angle (Pl. 69b) which was no doubt concealed by the upper structure of mud brick, carried straight through to the drain wall.

Between Rooms 6 and 7 a new partition wall was built and the old one was ripped out. This seems to have been an afterthought because the east end of the new wall abutted against the back face of the drain wall and did not bond with it (Pl. 69c); also because it unnecessarily complicated the drainage of the house. The new wall was carried straight through without a bend along the south face of the old: thus Room 6 was increased by the width of its old south wall, Room 7 was reduced by the width of the new one. The main drain of the old house as we have seen ran eastward through Room 6 beside its south wall, and this had been taken into account in the building of the Great Drain by leaving an inlet on the line of this channel. When the new partition wall was built between Rooms 6 and 7 it had been decided to shift the drainage and carry it under room 7 instead of Room 6; perhaps Room 7 now became the bathroom. In any case the new line of drainage—part of the channel of inverted roof tiles was found in place in Room 7—running eastward through Room 7 found no outlet through the wall of the Great Drain and therefore a small rectangular opening was left in the partition wall near its east end when it was built. The house drain therefore ran eastward through Room 7, turned at a right angle toward the north to pass through the opening left in the partition wall—one tile was found in place in the opening—and then again turned eastward at a right angle to find its exit through the inlet into the Great Drain in Room 6 (Pls. 68a; 69c).

More considerable changes were made at the northeast corner of the house. A

new north wall was built inside the line of the old, leaving the foundation of the corner of the older house outside (Pl. 68c). The new wall was carried as far to the west as Room 3: from there westward the north wall of the house remained unchanged. At the same time the arrangement of Rooms 4 and 5 was altered. A new partition wall was built from north to south dividing the old Room 4 into two nearly equal parts, and the western half of the partition wall between 4 and 5 was taken down and its foundation buried under the filling thrown in to raise the floor level. This alteration resulted in a tiny room, 5, at the corner of the house, and a large L-shaped room, 4, on two sides of it (Pls. 68b and 69d). This latter connected with House D through a door left in the new north wall. We could find no good explanation for this door. In the first period of the house there was none, even though the passage or alley running eastward between Houses C and D might have been useful as a way out to the road at the east. The building of the drain obliterated the road at the east and made the passage between the houses useless as a way of access to them. The owner of House D was fully cognizant of this, and appropriated the passage to his own use, as we shall see, by building a new south wall for his east room, 5, which blocked it. The door, then, can only have led to House D. It is possible that the owner of House C took over House D at this time, or that the owner of House D took over a part of House C, perhaps Rooms 4 and 5; or even that the door was left so that House D, which had no well, could be supplied from the well of House C. Whatever may be the explanation, in the third period the door was blocked up and the houses again became separate without internal communication between them.

All of these changes except the making of the door and the redivision of the corner area between Rooms 4 and 5 resulted from the building of a new east wall over the drain wall.⁹⁶ There were apparently no changes in the western rooms of the house. At this time the court was extended westward to include the south end of the corridor, 1 (plan, Fig. 11). Its floor level was raised by 0.24 m. and the new floor was carried without a break westward over the foundation of the old west wall of the court. This arrangement was an improvement; it made use of the waste space at the south end of the corridor, gave direct access from the court to rooms 10 and 11, and no doubt also brought more light from the court to both of them.

At the same time the well was lined with a curbing of terracotta tiles, which started just at the level of the new floor of the court. There was no way of proving

⁹⁶ The new north wall seems to have bonded into the drain wall at the corner, but the space here was too narrow and occupied by too many various foundations for deeper digging to be possible. It is unfortunate that precisely between Houses C and D and opposite the passage between them the south wall of the Roman drain abuts against the inner face of the west wall of the Great Drain, concealing any inlet there may have been for drainage from the passage between the houses. The abutment of the Roman drain also involved some rebuilding at the higher levels; gaps occur exactly at the corners of the two houses, where the corner blocks, lying at each side of the abutting Roman wall, were taken out for reuse.

whether the well had been dug at this time, or merely lined with tile drums. The latter seems the more probable; an indication that the well itself was not dug at this time was the absence of any great amount of dug bedrock under the floors of the second period of the house. Had the well been made at this time a great quantity of spoil would have been available from its digging and this would have been a most useful filling for the raising of the floor levels of the rooms to east and north. No such filling was found; the gravelly earth which was used instead seems to have been brought from elsewhere, perhaps from the digging of the channel for the new drain at the east. It was spread over the old floors and surfaced with clean clay. The sherds found in it agree with those from the filling behind the drain wall in dating the second period of the house at the beginning of the fourth century.

Third Period

The third period of the house involved no changes in its plan. The rebuilding which took place at this time perhaps was done in consequence of a flood in the Great Drain at the east. We have noticed in House A a raising of the level of the fourth-century phase of the house, and the two houses were probably re-levelled at about the same time and in consequence of the same cause. In House C the change involved a new reconstruction of the east wall. The height of the stone socle carrying the wall of sun-dried brick was raised. On Pl. 69b appears the new stone socle, nowhere preserved to its full height, which was put in on top of the drain wall on the bedding which had carried the brick wall of the second house. The new socle raised the bottom of the brick wall still higher above the channel of the drain; apparently the old one had not been high enough, perhaps because the drain had raised its bed by silting. At the same time the levels of the floors of all the rooms were raised. In some places this involved a heightening of the stone socles for the interior walls: the north-south wall between Rooms 3 and 4 was built higher, and it now shows (Pl. 70a) a good finished face at the level of the floor of the first house, on top of which lies a rough bedding course to carry the socle wall, again with a good face at a higher level, of the third period of the house. New and higher stone socles for mud brick walls were observed also in all the rooms of the northeast part of the house, especially between Rooms 4 and 5. At this time, too, the door in the north wall connecting with House D was blocked up. The level of the court itself was raised by 0.28 m. With each raising of floor levels in the house the court was also raised, and its floor continued throughout the history of the house higher than those of the rooms around. A flight of steps was put in to lead down from the court to Room 3 at the north; the rough stone beddings of the steps themselves were found in place (Pl. 70b) and their presence proves beyond the shadow of a doubt that the court was really higher than the other rooms. At this time the court, Room 7, and Room 12 were paved with floors of fine terrazzo, small pebbles in cement laid on a heavy bedding of stones. The paving of the

court, which was open to the sky and which contained the well of the house, was sensible; the paving of Room 7 suggests that it was the bathroom. It will be noted on the plan, Fig. 11, that the floor of the court was made with a definite slope from west to east, toward Room 7 and the drain. Room 12 had its own water supply, well and cistern, and paving in this room where water was apparently used was also very suitable. The raising of its floor level, though only by 0.30 m., was probably done to keep even with the gradually rising surface of the street outside at the north. The presence of both well and cistern in the same room at the same time implies some discrimination in the use of water; probably the well water was used for drinking, the cistern water for washing and other domestic purposes.^{96a} The raising of the floor level of the court involved a change in the arrangements for its well. The top of the tiling was now left considerably below the new floor level. Two rough pieces of limestone were found in place at the east side of the well, overlying the tiles, and a gap in the flooring at the west was probably once occupied by similar blocks. The south face of one of the blocks still in situ shows a cutting for a horizontal wooden beam, and two rough round holes in the limestone block no doubt were used in fastening the beam in place. This was the foundation which carried a windlass, or some similar device, that stood over the mouth of the well (Pl. 70c).

These alterations in House C seem to have been made at about the middle of the fourth century, or slightly later. It was not so easy to get material for the dating of the third period as for the second; the upper levels of the house had suffered in Roman and Byzantine times and also from a picking-over for building material for reuse when the house was abandoned. From below the third floor level of the court at its west end, where we made a cut to clear the west end of the court of the first house, the latest object was the lower part of a characteristic black-glazed skyphos of the mid fourth century, of the sort found at Olynthos and attributed to the last years before its destruction in 348 B.C.⁹⁷

One object found under the floor levels of the third period of the house (in Room 4) is published here. It is of interest because it was found near the Poros Building which, as has been suggested, may have been a law court.

Bronze Dikast's Ticket. Pl. 71b.

Inv. B 822. P. L. 0.102 m. W. 0.012 m. The right end broken off. Very thin bronze, inscribed with punched letters. ΔΗΜΟΦΑΝΗΣ ΦΙΛΙ[|ΚΗΦΙΣΕΥΣ The name does not seem to

bé otherwise known, though a Demophanes of Kephisia is mentioned in a prytany list dated 211/10-202/1 B.C., possibly a descendant: cf. *Hesperia*, Supplement I, no. 37, line 17 (=I.G., II² 913).

^{96a} Vitruvius (VIII, 3, 6) writing in the time of Augustus observed that the Athenians did not drink from the conduits which brought water into Athens because the minerals in that water hardened the muscles and the joints; they used the conduit water for baths, etc., while they drank from wells. The Agora Excavations have shown that in the time of Vitruvius cisterns were comparatively rare in Athens; in the Hellenistic period when cisterns were certainly common the cistern water presumably served many of the domestic needs.

⁹⁷ Like *Olynthus*, V, nos. 971-980, pl. 185; dated in the first half of the fourth century.

HOUSE D

Plan, Figs. 1, 7, 11.

House D lay to the north of C and was entered at the west through a door facing the Street of the Marble Workers at its bend. The north side of the house bordered the little square between the street and the south end of the Poros Building; at the east lay the old roadway and its successor, the south branch of the Great Drain. The house had suffered rather more damage than had House C at the south; its eastern part was overbuilt by a Roman bath, and its entire northwestern corner had been cut away in Byzantine times. The house was considerably smaller than C, with only six rooms, half as many as in House C. It was entered by a corridor leading to the court, numbered respectively 1 and 2 on the plan; the rest of the rooms have been numbered as in House C; clockwise starting from the north, 3-6. The house measured at a maximum 13.50 m. in length from east to west and 10.40 m. in width from north to south. Its plan was irregular; the construction was the same as that of House C, sun-dried brick on socles of stone. Like House C, House D had three periods.

First Period

The house contained a courtyard placed at the middle of its south side and sharing a party wall with House C at the south. The court was entered by two corridors leading east and west; one led from the southeast corner of the court to the roadway at the east, the other from its northwest corner to the front door facing northward to the Street of the Marble Workers. A small room, 6, lay to the south of this corridor, sharing a party wall on its south side with House C. To the north of the court lay the largest room of the house, 3, perhaps the *andron*; from it opened another room, 4, at the northeast corner of the house. Between Room 4 and the corridor from the southeast corner of the court lay another room, 5, which opened directly from the court at the east.⁹⁸

The line of the north wall of the house is given by a large block of limestone which is still in place, though it probably belonged to the latest period of the house; the northern limit of the house, bordering on the square, must have been constant. This block was built over by the Roman bath, which preserved it from the depredations of Byzantine times since it would have been too much labor to cut away the overlying mass of Roman rubble and concrete in order to get at it. The west wall of Room 3 is preserved only by the south end of its trench, filled with a bedding of small stones belonging to the latest period of the house. This trench falls exactly on the line of a wall of well-cut polygonal limestone blocks with broached faces toward the

⁹⁸ The width of the corridor, 1, was 1.20 m. The court measured 4.30 m. from east to west and 4.80 m. from north to south. On its central axis Room 3 measured 5.20 m. from east to west and 4.60 m. from north to south.

east, of which one is still *in situ* just to the north of House D, and several more at the west side of House E; the rough bedding of small stones for similar blocks, now disappeared, was found in other places on the line of the wall, which seems to have been a retaining wall along the east side of the Street of the Marble Workers from the corner of House F at the north to the projecting corner of House D at the south⁹⁹ (plan, Fig. 7). This street retaining wall must have been used as a foundation for the west wall of Room 3 by the builders of House D.

At the east Room 5 projected about a meter beyond the face of the room at the north, 4, and beyond the east face of House C to the south. This projecting room was separated from House C by the narrow alley or passage between the houses, which carried the drainage of the court of House D to the roadway at the east. One tile of the drain was found in place, and there were traces of gravelly deposit left by the water.

House D was already in existence when the drain was built, as we have seen, since blocks taken from the street retaining wall which served as foundation for the west wall of Room 3 were built into the drain wall. Like those of House C its clay floors immediately overlay the gravelly deposit of Geometric times under the earliest road and in the stream bed. The well in Room 6 (plan, Fig. 7) was also Geometric. The date of the original construction is therefore difficult to fix; it probably falls not long after that of House C, and before the middle of the fifth century. The house was already built and inhabited when a shallow pit was made through the floor of Room 2, the court, and a pyre of some sort was burned in it. The pit was a shallow hollow scooped in the floor, 0.40 m. in diameter. Its bottom and sides were reddened and baked by the fire which had burned in it. The floor was overlaid by a heavy deposit of cinder and charcoal, and fragments of a number of small pots which had been broken and burned lay among the charcoal. The red-patterned *lekanis* lid, No. 6 below, lay with most of its pieces together as it had fallen into the fire and broken. Except for the fact that it was round and very shallow, this pit was reminiscent of the pyres in the archaic cemetery and of Grave 50, and also of pyres exactly like it of the fourth century.¹⁰⁰ There is good reason to believe that these pyres of the fourth century were the remains of infant cremations, and the burned pit in the court of House D may have been another such, though it was earlier by nearly a century than any other which we have found. Scattered through the cinders was a number of small bits of burned bone, of which some could be identified as belonging to animals, while

⁹⁹ Somewhere along the square there must have been a stair or ramp in front of the retaining wall; the level of the street was higher than that of the square. We found no traces of it. At some time before the drain was built the central part of the retaining wall must have been damaged and abandoned; several stones in exactly the same style as those of the wall, and with broached faces, were noticed built into the wall of the drain.

¹⁰⁰ See *Hesperia*, XX, 1951, pp. 110 ff.

others were not definitely identifiable as animal or human. The pit must have been made at some time toward the end of the third quarter of the fifth century. It was covered by a new floor laid over the court, still during the first period of the house and before the alterations were made at the time of the building of the drain. The pottery found in the burned deposit of the pit is described and dated below by P. E. Corbett.¹⁰¹

1. *Black-Glazed Stemless Cup*. Pl. 73.

Inv. P 19315. H. to top of preserved handle, 0.032 m. Diam. as restored, 0.12 m. One handle and about half the body and foot restored.

Small rounded ring foot. Completely glazed save for a band round the outer face of the foot, the resting surface, and the underside which bears two glazed circles and a dot. The glaze much worn on the surviving handle.

A vase from the katharsis pit on Rheneia closely resembles our cup in shape and in the decoration of the underside; for Agora examples from the third quarter of the fifth century see *Hesperia*, IV, 1935, p. 507, Nos. 34 and 35; V, 1936, p. 339, fig. 7, right.

2. *Black-Glazed Skyphos, Corinthian type*. Pl. 73.

Inv. P 19314. H. 0.09 m. Diam. of rim 0.095 m.

Small pieces of foot, wall and of one handle restored. Delicate fabric; flaring ring foot. Completely glazed save for a small reserved disc on the underside in which is a glazed circle and a dot. Good glaze, with some grey patches.

Parallels for the profile, fabric and decoration of the underside can be found in Agora well-deposits of the third quarter of the fifth century; cf. *Hesperia*, IV, 1935, pp. 505-6, No. 26, 30 and 32.



Fig. 13. Profile of Plate, No. 3.

3. *Black-Glazed Plate*. Pl. 73, Fig. 13.

Inv. P 19318. H. 0.027 m. Diam. as restored 0.182 m. About half of the rim preserved, with parts of the foot; the centre of the floor is lost.

Double grooved rim, sloping toward the centre of the vase. Slightly spreading rounded ring foot. On the floor is part of the impressed decoration; it consists of a double ring of ovules. All of the plate that survives is covered with good black glaze.

There is a general similarity of profile between this plate and two others from an Agora well-deposit of the last quarter of the fifth century (*Hesperia*, XVIII, 1949, p. 325, fig. 3), but the differences of detail are significant: the greater depth of the vertical "wall," the sharp angle which it makes with the floor, and the comparatively narrow rim betray an earlier stage of development.

¹⁰¹ This pit or pyre is briefly mentioned and described in *Hesperia*, XVIII, 1949, p. 216, and the pottery illustrated, *ibid.*, pl. 39, 3-5.

4. *Fragmentary Black-Glazed Squat Lekythos*.
Not Illustrated.

Inv. P 19316. P. H. of main portion, 0.055 m. Four joining pieces give part of the foot, wall and shoulder; four other non-joining scraps include part of the handle.

Angular shoulder; concave moulding at inner junction of foot and floor. Underside reserved; the glaze much peeled. An oval hole, length ca. 0.035 m., breadth ca. 0.03 m. was cut in the side after firing.

The concave moulding beneath the foot dates the lekythos to the second half of the fifth century; see *Hesperia*, XVIII, 1949, p. 329.

5. *Black-Glazed Lekanis-Pyxis*. Pl. 73.

For the name, see *A.R.V.*, p. 911, end.

Inv. P 19317. Overall height as restored, including lid, 0.094 m.; max. diam. 0.126 m.

Parts of lid, bowl and handle restored; the knob restored by analogy with a similar lid on the Agora shelves (P 10287; no context). The upper surface of the lid is moulded into five broad and carefully modelled rings. The rim of the bowl is flanged to take a lid; beneath the flange on the outside is a thickening of the wall, marked off below by a shallow groove. The bowl has a single cup handle and a rounded ring foot. Lid and bowl are completely glazed; though the glaze is good in appearance it has a tendency to peel, particularly in crannies.

Vases of this form generally have two handles; compare *Clara Rhodos*, III, pp. 155-6 (found with a lebes gamikos in the manner of the Meidias painter; *A.R.V.*, p. 837, 29) and *C.V.A.*, Oxford, 2, pl. 65, 13. The one-handled version does not normally have a cup-handle; e. g., *C.V.A. Fogg Museum*, pl. 24, 10; Richter and Milne, *Shapes and Names of Athenian Vases*, fig. 150; Watzinger, *Griechische Vasen in Tübingen*, pl. 50, G 35. Examination of our vase shows that it was originally canonical, but that after it had been glazed one of the handles was removed, the roots smoothed over and more glaze applied to cover the raw areas;

presumably the unfired pot met with an accident, and it was not thought worth while to replace the damaged handle. A lekanis-pyxis from Gela (*Mon. Ant.* XVII, 1906, p. 344) was found in a grave which contained figured vases of the second quarter of the fifth century; a second example from Rhodes (*Clara Rhodos*, VI-VII, p. 466, middle row, sixth from the right) comes from a grave which contained *inter alia* a palmette lekythos; it resembles the other vase from Rhodes mentioned above; for a still later stage see *Clara Rhodos*, VI-VII, p. 158, fig. 144. The handle of the Agora example is intermediate between the form current in the second quarter of the fifth century and that of the years around 400 B.C.

6. *Patterned Lekanis and Lid*. Pl. 73.

Inv. P 19313. Overall H. including lid, 0.092 m. Max. diam. 0.121 m.

Part of one handle and pieces of lid and bowl restored. The rim of the bowl is flanged to take the lid. Horizontal band handles with a spur on the loop. Rounded ring foot. The lid is decorated with an oblique palmette scroll between two zones of ovules. On the flat top of the knob is an eight-spoked wheel; on the reserved face of the knob are irregular glazed lines, the result of careless work by the painter when making the ovules round the handle-root. On the bowl there is a reserved strip at handle-level on either side, with vertical zig-zags. The underside of the lid is reserved; so also the resting surface of the foot. On the underside, incised before firing A. Glaze somewhat peeled and damaged by fire; there are several places where a discolored fragment joins one which is unaffected.

For the form and decoration of the bowl, compare another Agora example from a well-deposit of the last quarter of the fifth century (*Hesperia*, XVIII, 1949, pl. 91, 47); for the vertical zig-zags see also Würzburg 433 (Langlotz, *Griechische Vasen in Würzburg*, pl. 121; similar in form to a lekanis which was found in a cremation pit with vases of the mid fifth

century; *Hesperia*, VI, 1937, p. 361); spurred handles also occur on Agora examples from contexts of the third quarter of the fifth century (e. g. P 15037). With the decoration of the lid compare three pyxis lids: Würzburg 542, Langlotz, *op. cit.*, pl. 202; Munich 2722, *C.V.A.*, 2, pls. 97 and 99; *Burlington Fine Arts*

Club, Exhibition of Ancient Greek Art, pls. 97 and 100, I 56. The Würzburg and Munich pyxides are to be dated around 410 B. C., but the other belongs to the thirties of the fifth century. On the basis of the evidence here assembled our vase cannot be dated more precisely than to the period between 440 and 400 B.C.

The stemless cup, skyphos, plate and lekanis-pyxis belong to the third quarter of the fifth century and probably were made in the later years of that period. The lekythos and lekanis cannot in themselves be dated with much precision, but the absence of all evidence to the contrary entitles one to regard them as contemporary with the other vases from the same burial.

Second Period

The alterations made when the Great Drain was built were less far-reaching in House D than in House C. We have already noted that the line of the drain had to be swung farther toward the northeast in order to bypass the projecting corner of Room 5 of House D. At the south the drain wall was built outside of Room 5; but during construction it seems to have been realized that the drain line would again have to be changed, and quickly, in order to get by the southwest corner of the Poros Building already in existence at the east side. This seems to have involved a change of plan; instead of carrying the drain entirely outside of Room 5, its builders turned its line northward again, starting from the south corner of the room. The east wall of the room was taken out; a few bedding stones still remain at the bottom of its trench. The drain wall was used as the foundation for the new east wall of the room. The line taken by the drain was directly to the northeast corner of the room. The lowest foundation block of that corner (Pl. 70d) was left in place as foundation for the new drain wall. Northward of this corner the drain wall was not continued, but allowed to jog back to the line of Room 4 to the north of the eastward projection of Room 5 beyond Room 4. The line of the west drain wall resumed with the east wall of Room 4. Since the direction of flow was from south to north this jog was of no importance in the functioning of the drain. The adjustments made in the east wall of Room 5 in the end resulted in the addition along the east side of the room of a long wedge-shaped piece, its point toward the north. The northeast corner of the room remained where it has been before; the southeast corner was extended eastward by about 0.90 m. This gave an entirely new orientation to the east side of the room. The building of the drain had made the old roadway useless; in front of Room 5 of House D the space between the inner faces of the drain walls at the corners was only 0.70 m. at the north and 0.60 m. at the south—too narrow for passage. The corridor which had connected the old roadway with the court of House D now became

useless as a passage also, since it led nowhere but to the drain. Taking these factors into account, and in order to make his east room more shapely, the owner of House D now blocked up the corridor by building a new south wall for Room 5, running it westward at a right angle to the new east wall (Pl. 68c; Fig. 7) until it met the wall of House C. We found no trace of any new arrangement to take care of the drainage from the court, which had passed out through the corridor. The new south wall of Room 5 must have met the north wall of House C to the east of the doorway left in the new north wall of that house to connect the two houses at this time.

One other change was made in House D in its second period. A column base of poros, 0.30 m. in diameter, intended to carry a wooden column, was set in the court (Pl. 71a). The position of this base is curious; it lies only 0.90 m. from the west wall of the court, though it is about midway between the north and south sides. A shed roof supported by a column and only 0.90 m. deep along the west side of the court would hardly seem to be worth building. We must look to the third period of the house for an explanation. In the southeast corner of the court in the latest period of the house there was a great hearth, 2.90 m. long from north to south and 1.00 m. wide, against the east wall of the court. Thin stones and tiles set on edge bordered its north and west sides; it was floored with square tiles. Those tiles of the floor which had remained in place were badly cracked and flaked by fire, and where the filling over them was undisturbed it was of ashes and charcoal. Obviously this arrangement was a hearth, and from its condition it seemed that it had been used and withstood intense fires built on it over a fairly long period. The court of the house was its workshop, and the work carried on there was connected with fire on a hearth. It was desirable that the hearth and the working space in front of it to the west should somehow be sheltered from the rain, and no doubt the column carried a shed roof extending over the whole southeast part of the court. Perhaps beams were carried from the column to the east and south walls of the court, to support the outer ends of a roof pitched from south to north, or with two pitches, to north and to west. There must have been some sort of a vent in this roof to let out the smoke from the hearth. The remains of the hearth as we found them belonged to the third period of the house, but the column which carried the roof that sheltered it and the working-area in front of it was put in during the second period. In the southeast corner of the room, and under the floor of the third house, we found many shapeless slugs of iron and some of bronze which suggested metal-working and which carried the operation back into the second period of the house. A great many fine marble chips in the floors of the court in the second period imply that marble as well as metal was worked in House D. But the main operation was metalworking; and very apropos was the inscription on a lead *defixio* found in Room 5. The *defixio* lay in the lowest layer of dissolved mud brick which overlay the house; the sherds in this layer were as late as the middle of the third century. But the ruins of the house had been picked over for

building material after its abandonment, and it is entirely probable that the little lead curse had been tucked into the foundations or under the floor of the house somewhere (as such things should be underground) and that it was thrown up from its original position by the ransackers for building material. The letter forms are of good fourth century style: four-barred sigmas, ionic lambdas, etc.: Pl. 74a.¹⁰² The text follows:

Καταδέω Ἀρίσται[χ]μ<ο>ν τὸ(ν) χαλκέα
 πρὸς τοὺς κάτω καὶ Πυρρίαν τὸν χαλκέα
 καὶ τὴν ἐργασίαν αὐτοῦ καὶ τὰς ψυχὰς
 αὐτῶν καὶ Σωσία(ν) τὸν Λάμιον
 5 καὶ τὴν ἐργασία(ν) καὶ τὴν ψυχὴν αὐτο[ῦ]
 καὶ ΑΛΗΓΟΣΙ καὶ ἀδρῶς καὶ ἀδρῶς
 καὶ Ἀγήσι(ον) τὴν βοιωτ[ί]α[ν].

Line 1: ΑΡΙΣΤΑΙ . MN; ΤΟΧΛΑΚΕΑ. Line 2:

ΠΡΟΣΣΤΟΣ, ΠΥΡΡΙΑΝ. Line 4: ΣΩΣΙΑ.

Line 5: ΕΡΓΑΣΙΑ. Line 7: ΑΓΗΣΙ.

In the first line the *omicron* of the name Aristaichmos was omitted, perhaps accidentally but perhaps on purpose. In the second line the name, Pyrrias, would seem to have been misspelled on purpose; such misspelling was part of the magic. The meaning of ΑΛΗΓΟΣΙ in line 6 is not quite clear. The name of the Boeotian lady in the last line, Agesion, was pierced by the nail thrust through the folded tablet in three places, but all the letters, except the next to the last which in any case must have been an *iota*, are clear. The name was abbreviated.

Aristaichmos and Pyrrias, both smiths, are consigned to the gods of the underworld, and together with them Sosias of Lamia, a slave or a metic, a craftsman whose work is not specified, and also Agesion, a Boeotian woman, who was probably the cause of the ill-feeling. These were without doubt the smiths who worked at the forge or foundry in the court of House D in the fourth century. Aristaichmos and Pyrrias may have been Athenians; it is not specified that they were not, as in the case of the other two; one of them was perhaps the owner of House D in the fourth century.

¹⁰² Inv. IL 997. Present L. with edges as bent, 0.145 m. W. 0.065 m. *Hesperia*, XVIII, 1949, p. 217, pl. 39, 2. The *defixio* was found rolled up; it had been transfixed near the lower edge by a nail. Some of the letters have been lost in the foldings of the lead, which was in a very delicate brittle condition. Help with the reading was given by G. Stamiris and Miss Anna S. Benjamin.

Third Period

As in House C, the court of House D was paved with a terrazzo floor at some time in the fourth century when there was a general raising of levels. The hearth of which we have already spoken was laid on top of the floor; and only under the hearth itself was the floor surface preserved. Elsewhere in the court the floor surface had worn through or broken away; all that remained was the coarse bedding of small stones. The size of the court was further limited by an eastward prolongation of the wall between the corridor to the street and Room 6; at the same time the corridor seems to have been blocked off at its west end by a wall, and entrance to the house must have been through Room 6. The purpose of this rearrangement was not clear, nor could we trace how far eastward into the court the wall had been extended, because its new foundation had been robbed of all its stones at the east, and its trench was not clearly defined. The old corridor now became a deep narrow closet-like space: perhaps a suitable place in which to restore a staircase leading to an upper room. The wall to the north of it, dividing the corridor and the court at the south from Rooms 3 and 4 at the north, was straightened by building a new foundation over the old. A new south wall for Room 5 was built along the line of that of the first house, and the passage to the drain was restored (at the same time the doorway into House C was closed). The wall of the second period of the house, running diagonally through the passage, was taken down, and the corridor was again used for drainage: part of the roof-tile drain installed at this time was found still in situ, bedded on top of the foundation of the south wall of the second period, and taking its diagonal line.

The line of reused poros blocks dividing the corridor and Room 6 from the street at the west probably belongs to this period of the house, which suggests a general rebuilding. Although nothing later than the end of the fifth century was found in the footing-trench of this wall, the trench itself was detected in the street levels of the earlier part of the fourth century. Since these had been cut through when the poros blocks were laid, the house probably got a new west wall beside the street at the same time that the other alterations were made, about the middle of the fourth century.

HOUSES C-D: ABANDONMENT

At some time in the second half of the fourth century the two houses at the bend of the Street of the Marble Workers were abandoned and fell to pieces. We found no evidence to indicate that they had been destroyed by fire or any other violent means. The fill that overlay them in many places was their own mud brick which had dissolved into a homogeneous mass of red clay-like earth almost devoid of sherds. Apparently the houses were abandoned, for what reason we cannot know, and everything of value was taken away at the time.¹⁰³ The walls of brick were soon dissolved by the weather,

¹⁰³ Such as good worked blocks like thresholds, steps, etc.; roof tiles which could be salvaged

and the foundations were picked over for stones to be reused elsewhere. The latest sherds from the fill in any of these plundered wall trenches were of the first part of the third century, and the occasional coin found in it was almost invariably of the late fourth or early third century.

The approximate time of the abandonment of the houses was given by evidence of two kinds; a number of small pyres was found scattered through the rooms of the houses, and the well and cistern in Room 12 of House C yielded a certain amount of pottery from the earth thrown into them when they were abandoned and filled.

The pyres are marked Py on the plan, Fig. 7. Four were found in House C, where one lay in each of Rooms 4, 6, 8, and 12. Three more were found in House D, in Rooms 2, 4, and 5.¹⁰⁴ These pyres were made in small pits cut in the surface of the ground, in some cases at the floor levels of the latest period of the houses, in others still higher. That the pyres were burned in the pits was shown not only by the heavy deposits of ash and charcoal which overlay their floors, but by the fact that the earth below and at the sides had been baked by the heat of the fires. Some of the pits measured up to 0.80 m. in length and had contained sizeable fires. It has been suggested elsewhere¹⁰⁵ that these pits were the remains of infant cremations, especially because some of them contained dummy alabastra made of poros. However that may be, the fires in these pits could not have been burned while the houses were still standing roofed. With the exception of one, in the court of House D, all of the pyre-pits lay in rooms of the houses. Further, giving final proof that the houses were already abandoned when the pyres were burned, some of the pits, in Rooms 4 and 6 of House C, had been made through levels which overlay the house itself, passing unbroken over the lines of its internal walls (Pl. 71c). The pyres of this sort found in the Agora were discussed in a previous paper.¹⁰⁵ It may be remarked here merely that the pottery from all the pits in Houses C-D, with one exception, was of the second half of the fourth century or the early third. The exception was the pit in Room 12 of House C, which contained a lamp of Broneer's Type IX and a small kantharos of West Slope ware. The pit must be dated well down in the third century. We are thus forced to the conclusion that Room 12, the shop, outlived the rest of House C. This conclusion is confirmed by the pottery, and most of all by the stamped amphora handles, from the filling of the cistern in the same room. One coin was found in the cistern, an Athenian coin dated between 307 and 283 B.C.; in addition there were some unguentaria of the plump early shape, and lamps of Broneer's Types VII and VIII.

unbroken; all the roof timbers and woodwork. The value put upon woodwork is referred to time after time in ancient sources: cf. Lysias, *On the Property of Alcibiades* (XIX), 28-31; Thucydides II, 14; *I.G.*, II², 2499.

¹⁰⁴ Two pyres are marked in Room 2 on the plan; one of these was the earlier pit with burning, made in the fifth century at a considerably lower level, and already discussed above, p. 218.

¹⁰⁵ *Hesperia*, XX, 1951, pp. 110 ff.

The stamped amphora handles ¹⁰⁶ from the bottom of the cistern were all Rhodian, the latest to be dated in the third quarter of the third century. In the upper fill, thrown in when the cistern was finally abandoned, was a Knidian handle of the late third or early second century. We may say that the cistern was probably filled up around 200 B.C. The filling of the well was to be dated at about the same time. Room 12 was probably altered and kept as a shop after the rest of the house was abandoned because it lay at the street corner where traffic went by and business was to be had. The pyre in Room 12 was earlier than the filling of well and cistern; perhaps it lay outside the latest phase of Room 12. The terrazzo floor of the room had been cut through from east to west by a wall bedding; the new wall that lay in this bedding may have been the south wall of the curtailed shop in its last phase.¹⁰⁷

HOUSES C-D: HOUSE TYPE

Of all the fifth century houses in the bottom of the valley only C and D had complete plans preserved. One was apparently a workshop, the other a dwelling. The feature common to both is the central courtyard approached by a corridor from the street door, and surrounded by the various rooms. In House C the courtyard was placed to the south of the middle of the house, in House D at the south side; in both houses the largest and apparently the most important room was placed to the north of the court. Neither house had a peristyle, or even a colonnade at one side of its court; and neither had anything that could be described as a *pastas* in the Olynthian sense. The arrangement at the east side of the court of House C filled the function of a *pastas* by giving access to the corner rooms; but instead of carrying a corridor to the sides of the house at one end of the court, the corner rooms were pulled forward to overlap its corners; this could be done because the rooms between, at the east side of the court, were small ones. In the Olynthian house the *pastas* lay usually at the north side of the court, in front of the *andron*. Here we find the most important room of the house opening on the court at the north, as it should, but opening directly, without *pastas* or anteroom. This room, too, was without the raised platform for couches around three sides which was usual at Olynthus and Delos, and for which an example can be cited at Athens ¹⁰⁸ in Dörpfeld's excavation between Pnyx and Areopagus. The fragment of the Athenian house includes the *andron* with its raised platform and an anteroom, facing south, presumably to the court. Dörpfeld seems

¹⁰⁶ Miss Virginia Grace kindly analyzed and reported on the handles from the cistern.

¹⁰⁷ The main well of House C in the courtyard seems to have continued in use, or to have been found and reused, until the time of Sulla's sack of this part of Athens in 86 B.C.

¹⁰⁸ *Ath. Mitt.*, XX, 1895, pl. IV; marked "ESTRICH" near the upper right corner of the plan. The scheme is given in *Olynthus*, VIII, p. 180, fig. 11. Cf. *Hesperia*, XII, 1943, pp. 312, 333 for a similar border in a house of the mid fourth century B.C. on the Pnyx Hill.

to have thought of it as later in the Greek period, perhaps of the fourth century, and has so marked it on his plan. There are remains of several Greek houses in this area, some with masonry resembling that of our B and K-L; but they were patched in later times, only partially excavated, and yield no full plan. It is difficult to find a parallel for our houses; very few dwellings of the fifth century have been excavated which were well enough preserved to show a full plan. The house at Dystos in Euboea¹⁰⁹ was entered, like ours, through a long corridor. The main room was set at the south side of the court, with two smaller rooms behind it. This house is thought to be of the fifth century; its masonry resembles that of our fifth century houses. Another house of the same period, and again built in a similar style of masonry, the so-called "priests' house" at Zoster (Vouliagmeni) in Attica,¹¹⁰ consisted of a large enclosed court with colonnades across two sides; the main room lay at the south, facing the court toward the north through a colonnade. Neither of these houses resembles our C-D; those in Dörpfeld's old excavation to the south are fragmentary, and apparently somewhat later. Our House C is earlier than any of the houses in Olynthus, and its plan perhaps less developed; nevertheless it much more closely resembles the *pastas* and peristyle types of house of Olynthus and Delos than it does the *prostas* type of Priene.¹¹¹ We do not know enough about the plans of Athenian houses of the fifth century to say whether our House C is typical; what is common to both C and D, however, probably is typical, and that is a court at the southern part of the house, the main room to the north of it, and approach to the court through a long corridor. The developed *andron* with anteroom and raised platform around the sides probably came later; the *pastas* of the Olynthus type may also have come later, or may have been an adaptation made for houses in a more northerly climate, though it is common also at Delos. Our House C sufficiently resembles the houses of Olynthus in plan to give greater likelihood to the suggestion¹¹² that the *pastas* and *pastas*-peristyle types of plan common at Olynthus and Delos were also prevalent at Athens.

House C is somewhat earlier than the houses of Olynthus; the fully developed *pastas* may not yet have emerged at Athens, though it seems to have been in common use at Olynthus when the North Hill settlement began in about 432 B.C.¹¹³ We cannot say that the plan of our house was radically affected by the exigencies of the situation and the lot; the architect had he wished could have made the entrance from the street at the east, and extended a *pastas* across the north side of the court. That he did not do so implies not only that the western was the more important of the two

¹⁰⁹ *Ath. Mitt.*, XXIV, 1899, pp. 458 ff., fig. 5, pl. V.

¹¹⁰ *Eph. Arch.*, 1938, pp. 1 ff.; plan on p. 4, fig. 4.

¹¹¹ Cf. Wiegand, *Priene*, p. 285 ff., figs. 298-307.

¹¹² Cf. *Olynthus*, VIII, p. 151.

¹¹³ *Olynthus*, VIII, pp. 13 ff.

streets, but also that a *pastas* was not considered desirable here because so much room was taken up already by the corridor from street door to court.

It is very satisfactory to have a complete house plan from Athens of the first half of the fifth century, and the plan is more or less what we should have expected it to be from the analogy of the Olynthus houses. But one or two houses at Athens are not enough to enable us to draw any very sweeping conclusions as to the nature and development of the private house in fifth century Athens. It may be hoped that more houses will be found, so that the cumulative evidence will be enough to give us a more general picture of the Athenian house in the fifth century.

HOUSE E

Plan, Figs. 1, 7

The line of houses to the west of the drain was interrupted to the north of House D by the little square, 8.20 m. wide, beside the Street of the Marble Workers, which we have noted above. The first house to the north of the square was House E, a simple rectangular structure, badly preserved. Its west wall, like that of Room 3 of House D, was built on the street retaining wall as a foundation. To the north it shared a common wall with House F; it is not impossible that both were part of the same structure. The beddings of its east and part of its south wall were preserved; the house formed a simple rectangle 7.80 m. long from north to south and 5.50 m. wide from east to west. A small bit of the east wall above the rough bedding was well enough preserved to suggest a socle of light limestone construction, perhaps rather carefully fitted, below a mud brick wall. Two small bits of the floor were preserved, one at a higher level than the other, and implying two periods, or two rooms at different levels. Two large pits of Byzantine times had cut through all the rest of the floor, and taken away most of the south wall; no traces were left of any internal partition walls or of any supports such as column bases. The floor which lay at a higher level yielded a handful of sherds of the fifth century, none of which could be closely dated; the lower floor was merely a clay flooring spread over gravel of the Geometric period.

It could be demonstrated, however, that the house existed in the fifth century, that is, before the drain was built. The house seems to have had a gutter wall or curbing beside the line of the pre-drain watercourse at the east. The west wall of the drain was laid on top of it, and packed behind with small stones. This packing had evidently been put into a cut made through the outside ground level of House E at the east, and belonged to the drain. It yielded a few sherds of the late fifth century, to confirm again the date of the building of the drain. But more significant than the packing behind the drain wall was the way in which the blocks had been laid to overhang by as much as 20 cm. the face of the earlier gutter. They were so laid because

the space between the northeast corner of House E and the channel of the drain as planned was too narrow to accommodate the thickness of the drain wall blocks; the earlier gutter wall was considerably thinner. The drain blocks were therefore laid at the corner of House E, and for some distance toward the south, with their inner faces overhanging the old gutter wall, propped underneath their edges with rubble. For the space of a few meters toward the south from the northeast corner of House E, then, the west wall of the drain was set forward about 20 cm. in front of its normal line.

HOUSES H AND F

Northward of House E the narrowing space between the Great Drain and the Street of the Marble Workers was occupied by a string of houses, or rather workshops, which have been only partially excavated. The northernmost of these, H, was apparently a sculptor's or marble-worker's shop; it is still almost entirely covered by a house of later Roman times. We excavated along its northern edge, however, in order to fix the line of the south side of Piraeus Street just to the west of the bridge, and at the point where the Street of the Marble Workers and the Great Drain diverge (Pl. 57c). The northern limit of House H beside Piraeus Street was fixed for both the Greek and the Roman periods. We uncovered a bit of the Greek floor level at its northern edge; it was a characteristic marble chip fill floor, with enough marble dust to indicate that it had been formed on the spot by the working of marble, and that the house was probably another shop where marble was worked. The level at which the marble chip floor lay corresponded to a fourth century street level outside at the west; probably therefore House H goes back to the fourth century or earlier. It was included among the lettered houses as H despite the fact that it is unexcavated, chiefly for convenience of reference, since it lay at the junction of the Drain, Piraeus Street, and the Street of the Marble Workers. To the south lay two or more workshops.

HOUSE F

Plans, Figs. 1, 5, 14

House F was a workshop in which a central floored area was surrounded, probably on all sides and certainly at three, by tanks or vats set below floor level. These were lined with fine waterproof cement and had evidently been used in some craft of which the operation involved the working or soaking of material in vats filled with liquid. The house had two periods, like all the others in the bottom of the valley; the establishment existed in the fifth century, before the drain was built, and it was altered at the beginning of the fourth century at the time of the building of the drain, or shortly thereafter. The remains of the later period had best be described first, for though far from well preserved they are more completely exposed than those of the

earlier period which are in large part still covered by them. The building was 8.70 m. long inside on its central axis from north to south, separated from another establishment to the north by a heavy wall of poros blocks supporting limestone construction above. Its east wall was the west wall of the drain, its west wall fronted on the Street of the Marble Workers, and at the south it shared a common wall with House E. It may be noted that the drain wall at the east was built beside House F in the same "checkerboard" style of masonry (Pl. 81a) as beside House A farther to the

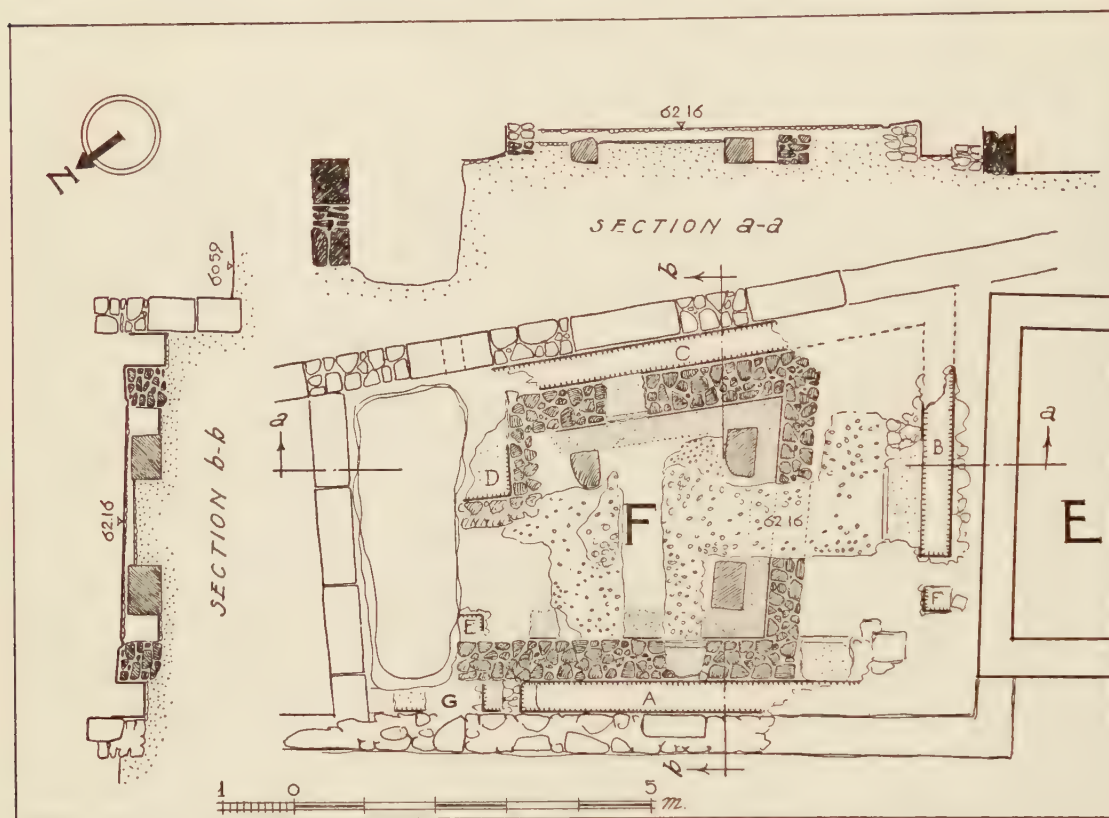


Fig. 14. House F: Plan and Sections.

south, and that on the line of the poros wall, the northern limit of House F, its construction changed to one of heavy limestone blocks cut in polygons and carefully fitted, but left with unfinished faces (Pl. 81c; Fig. 15). Since drain and street here converge toward the north, House F was irregular in shape, narrower (4.50 m.) at the north than at the south (6.40 m.).

Inside the house, walls of rubble ran parallel to its east, south and west limits; at the north a great pit of Hellenistic times had been cut right through the workshop

and left no traces of the arrangement of its north side. The space between the rubble walls and the outside walls at the other three sides was occupied by long vats or tanks lined with fine waterproof cement. These have been numbered from west to east, A-B-C (plan, Fig. 14). Part of another wider vat lay to the north of C, D on the plan. Two very small basins, E-F, lay near the west side of the area; and finally a cross wall to the north of A divided it from another vat or tank, G, which perhaps extended to the north wall of the house. At the east and on the line of the wall between A and G the rubble wall of C turns west, then north to enclose the south and west sides of D. An opening in the drain wall opposite D served to drain it; C and D may have been one. To the south one assumes another hole in the drain wall, which has here been plundered, as an outlet for B. None of the long vats is preserved to its



Fig. 15. West Drain Wall between House F and Bridge: Elevation.

full length; C at the east, broken off at both ends, still measures 4.10 m. in length. The west vat, A, was 0.44 m. wide, the others, B-C, only 0.40 m. The two smaller ones, E and F, were about 0.30 m. square. D and G were so broken that their measurements could have no meaning.

All the central space between these vats was occupied by a terrazzo floor of which the fine pebbled surface had mostly been worn away, the rough stone bedding alone remaining. Around the edge the terrazzo work covered the inner rubble walls of the vats, but at a level slightly higher than that of the rest of the floor, and with the resulting raised rim between vats and central flooring sloped inward toward the floor (Pl. 74b). The depths of the several vats varied somewhat: the bottom of A lay 0.38 m. below floor level, that of B 0.46 m., that of C about 0.50 m. The ensemble thus was a central paved area with long vats to east, south and west separated from the floor by a raised border sloped toward the centre of the room. Entrance was evidently from the north through the passage between A-G at the west and D at the east. Vat C used the west wall of the drain as its east side, where the hydraulic cement of the vat was applied directly to the back of the drain wall. This latest phase of the workshop was contemporary with the building of the drain at the beginning of the

fourth century, or perhaps slightly later. The pottery from under the highest floor of the establishment was of the late fifth century, suggesting that this phase dates from about the time of the building of the drain.

Deeper digging where it was possible to sink pits without destroying the remains of the latest period showed that the workshop had engaged in the same operations on the same site throughout the second half of the fifth century. The inner rubble walls of the vats A and C proved to have been the original outside walls of the workshop (Pl. 74c), which in its later phases had been extended to east, west and south. The establishment had always been irregular in shape; a cross-wall at the south, connecting the south ends of the inner walls of vats A and C, closed its south side, giving the room an inner length of 3.90 m. from north to south and a breadth at its south side of 3.25 m. In its earlier phase the plan of the workshop was the same as in the later, a central floor surrounded at three sides by vats sunk below its level. In the first phase, however, the floor seems to have been surrounded by one continuous vat 0.36 m. wide and 0.40 m. deep along its east, south and west sides. The waterproof plaster of these vats was preserved on their bottoms and adhering to the inner faces of the surrounding walls. The central area was reduced by the width of the vats to only 2.55 m. along its south side. Little more could be learned about the first period of the workshop, since the floor of the later overlay it. The date of its construction could be established, however, at some time around the middle of the fifth century, from the filling under its floor level. A heavy deposit of earth and small stones had been dumped in to level off the area before the workshop was constructed; the pottery from this filling was mostly of the first quarter of the fifth century, but it included an occasional piece to be dated in the second. This filling also contained many lumps of colored pigment; white, yellow, red and violet. Since, however, this filling was buried under the floor of the earliest workshop, the pigments can hardly have had any connection with the work done in it later on.

There seems to have been an intermediate period between the first and the last in the expansion of the house. A new west wall fronting on the Street of the Marble Workers was put up, and perhaps a new vat, A, made along its inner side. The southward extension of the house to the line of House E, and the making of the new vat at the south, B, may have been done when House E was built and before the building of the drain, though we found no evidence that the east wall of the older house had been extended southward to meet House E. The floor of the workshop was overlaid by several later earthen floors which had formed while the building was in use and its levels were gradually rising. The latest of these floors below the terrazzo floor of the final period was of rounded pebbles, carefully laid. The workshop seems to have gone out of use early; the trench of a later wall which had been cut through the floor yielded Hellenistic sherds, and none of the sherds from the filling in the vats themselves was later than Hellenistic.

Nothing whatever was found to give a hint of the use to which this elaborate establishment had been put. A shallow well in the northeast corner, or another well which lay to the north of the poros wall, may have supplied water for use in the vats. No stains had been left on the stucco of their walls to suggest that they had been used for dyeing or for any other particular purpose involving the use of color. The workshop can hardly have housed a press; no grindstones were found anywhere in the neighborhood. In the fillings over the house, and also under some of its floors, many pieces of animal bones were found, often the knobby ends of the big straight leg bones, which had been carefully sawn off. One assumes that these straight bones, after the ends had been sawn off and discarded, were fashioned into pins, needles, stili, etc.; but much of the discarded bone came from the deposits over the workshop and was presumably later, and in any case it is hard to see what use the vats would have been in the making of bone tools. There was simply not enough evidence (as in House K) from which to determine the exact activities that were carried on in this workshop.

The same was the case in the establishment to the north, separated by the wall of poros from House F, which was partly excavated, though it had been disturbed to great depth in early Roman times. This workshop contained a great tank (Pl. 74d) 3.40 m. long and 1.53 m. wide from north to south, lined with waterproof cement, and going far deeper than the vats in House F. At the north a long vat similar to those in House F ran beside the west wall of the house, connecting at its south end with the big tank, and at a higher level—its floor lay 0.50 m. above that of the tank. The workshop post-dated the drain, as the east wall of the big tank was the west wall of the drain; we could gather no more information as to its date, or its use, because it had been disturbed to bottom, probably at the time of Sulla. In the western part of the area between the big tank and House F lay a well, which had been repaired in post-Sullan times. The soft bedrock had apparently collapsed and a packing of large coarse amphoras was put in around the edges of the resulting pit. We could not dig the well because it was unsafe. The filling in the tank, evidently thrown in in Roman times, had been dug out probably at the south around the well when it was repaired; it contained pottery ranging in date from Geometric to early Roman, as well as sawn-off ends of bones and lumps of pigment. The original filling under the workshop had evidently been the same as that in and under House F.¹¹⁴

¹¹⁴ A curious glassy granular substance adhered to the sides and bottom of the tank throughout, and so uniformly that there could be no doubt that it was a residue from the manufacturing processes, whatever they were, for which the tank was used. Specimens of this substance were examined microscopically by Professor F. R. Matson of the Pennsylvania State College; his report stated: "The material is an aggregate of sand grains, most of them quartz, that are held together by a glassy layer. The glass has an index of refraction of 1.593 and is isotropic with no sign of devitrification. The glassy phase was present in sheet-like layers, and was quite thin. No comment on the meaning of this. The clay which coats this aggregate is water deposited, for it forms a uniform

HOUSE G

Plan, Figs. 1, 5

Another workshop lay across the way, on the west side of the Street of the Marble Workers. House G was a marble-worker's shop of which only the eastern half, badly preserved, has been cleared; the western half is covered by a large house of the second or third century after Christ. The entire area was evidently occupied also in very late Roman times. A well in the northern room of the house produced pottery of the fifth century after Christ and had evidently belonged to a house lying beside the Street of the Marble Workers at the west. All other traces of this house had been obliterated in Byzantine times, together with the northeast corner of House G. The east wall of the workshop, which had extended for a distance of 10.10 m. along the street, was preserved only in its lowest bedding course, a wide packing of small stones. This foundation had been protected from the drainage running over the surface of the street by a curbing or gutter wall set in front of it in the filling at the west edge of the street, mentioned above, p. 163. The house seems to have consisted of two rooms fronting the street at the east, and a large paved court with a well at

layer on the grains. It is soft, easily removed, and forms a plastic mass when mixed with water. It would appear to have nothing to do with the original nature of the material. I refined a fragment of the sample in a porcelain crucible over a Meker burner to see if it would fuse at a fairly low temperature. I could find no difference between the fired and unfired specimens when examining them under a binocular microscope. The specific gravity of the material was not determined, but judging from the feel of the porous sample, it would not be very high, so probably it is not from a smelter. The index of refraction of the glass is much too high for a normal soda-lime silica glass. Lead raises the index rapidly, as does iron. I ran a spot test for lead, but obtained no positive results."

Miss Marie Farnsworth examined the sample by x-ray diffraction and spectrographically. She reports: "Spectrographic results, which are discussed more fully below, showed no lead or any other metal present which could possibly connect this material with a smelter. Phosphorus, however, was present as well as iron which would help to account for the index of refraction found. An x-ray diffraction pattern of the material showed quartz and clay lines. Glass does not give an x-ray pattern. Both the original material and the glassy phase, which was separated by Professor Matson under the microscope, were examined spectrographically. The glassy phase, as would be expected, showed less silica than the original material, for it had been separated from quartz grains. The alkali metals, sodium and potassium, were present in both samples as well as the alkaline earth metals, calcium and magnesium. Calcium, in particular, was present in considerable amount in both. While the spectrographic results are only qualitative, they did indicate somewhat more potassium present in the original material than in the glassy fraction. While both samples were impure and showed traces of many elements, the only other element present which was unusual and of significance was phosphorus. Strong lines for this element were detected in both the original material and the glassy phase. The presence of bones in the vicinity makes it extremely probable that they were the source of the calcium and phosphorus found in this material rather than phosphate rock. The persistence of large amounts of calcium and phosphorus in the glassy material also makes it probable that some chemical reaction involving bones has taken place, but whether for a medicinal or some other technological reason I am unable to say"

the west; perhaps a shed stood in the northern part of the court. A partition wall of which again only the lowest bedding is still in place divided the two rooms at the east; of the wall separating them from the court at the west, part of the bedding is preserved, and part of the lower wall course itself at its junction with the partition-wall dividing the two eastern rooms. The wall was of thin limestone slabs set back to back, with good faces to east and west, and packed between with rubble. The slabs were polygonal with finely finished anathyrosis at the edges; small gaps were filled with bits of stone as carefully trimmed and fitted as the large blocks. The masonry suggests a date in the fifth century rather than the fourth; we did not dig any of the filling to the east of this wall. The level of the paved court at the west was high enough to conceal much of the carefully finished west face of this wall, which was evidently meant to be exposed; the paving therefore must represent a later period of the house. All the area around the well and to a distance of 6.20 m. from the south wall of the house seems to have been paved, probably with a terrazzo floor. Only the rounded bedding stones, some of them much worn on their upper faces, remained; at the north the paved area was bordered by a curbing of thin marble and limestone slabs set on edge. Water from the paved court around the well was drained away toward the north in a channel cut in the upper face of a line of limestone blocks set behind the wall of the east room; a couple of these channel blocks were found still in place, and more had been reused as building material in the walls of houses of the Roman period in the vicinity. The well which must have been the source of the water carried off in this channel stood near the middle of the paved southern part of the court, with a well-curb of poros over its mouth. The well could not be dug to bottom because it produced gas; the few sherds which came from it were Hellenistic. A large part of its filling, however, was of pure red clay which had perhaps been used in modelling or in the making of terracotta figurines. Near by to the north a group of fragmentary Hellenistic terracottas, with more than one example from the same mould, was found broken and scattered through a filling disturbed late in Roman times. In the northern part of the court there had evidently been a shed-like building of some sort, backed against the north wall of the house. Part of its west wall foundation was found in place, with a return toward the east at the south; the trench of its east wall, plundered and refilled in early imperial times, was also found, with a return at the south toward the west. For a space between the end of the return of the west wall and the end of the return of the east wall the hard surface of the floor of the court continued through the gap in the line of the wall; here at its south side must have been the door to the shed.

We dug some of the filling of the court to the east of the shed, finding layer after layer of fine marble chips and dust. Some of the layers were of pure marble dust so tightly packed as to resemble a hard lime mortar. These layers had formed on the spot where the marble was worked, and had been trodden hard by the workmen in the

course of their comings and goings. They all dated from the fourth century; probably the lower level in the east room represents the earlier period of the establishment. The workers here may have been sculptors; the presence of clay in their well supports the idea though the few sherds from the well were later and perhaps more closely contemporary with the figurines found outside the house at the north. In any case there can be no doubt that in the fourth century the establishment was concerned with the working of marble. Most of this work was no doubt done in the open air in the court, as it is in modern times; a plentiful supply of water was available for the drilling, sawing, grinding and polishing of the stone, and the shed was conveniently situated for the storage of timbers, tools and perhaps finished work.

Two small pyres were found within the limits of the house. One of them lay in the court close by the southeast corner of the shed, the other in the south room near its west wall. The pottery from these was of the end of the fourth century, suggesting that the workshop had gone out of use by that time, perhaps to be revived later as a workshop for the making of terracottas, reusing the old well of the marble workers.¹¹⁵

Having looked at the houses and workshops along the Street of the Marble Workers from the southern limits of our area northward to Piraeus Street, let us return southward along the east side of the Great Drain. The whole space from Piraeus Street southward to the plateia between Houses D and E was occupied at the east by the large building of poros and limestone. To the south of it lay the scanty remains of a simple house or workshop of the fifth century, House J. Beyond this to the south lay another workshop, K, which seems to have been built and occupied as a dwelling, then turned into a marble cutter's shop, and finally became perhaps part of a workshop for making terracotta figurines. Houses J and K faced on the old roadway at the east, opposite House D. The southern part of House K and the northern part of House L beside it had been cut through by the Roman version of the drain; House L was very fragmentary, but apparently also a workshop, perhaps a terracotta factory. The ground rises toward east and south in the area of House L, and in the higher levels late disturbances had gone to bedrock. We find no more traces of early houses toward the south for some distance, until we reach the somewhat fragmentary workshop, M, across the drain from House A and still farther to the south (plan, Fig. 7).

The east side of the drain was bordered for a distance of 37.50 m. southward from Piraeus Street by the Poros Building discussed above by Miss Crosby (pp. 168-187).

HOUSE J

Plan, Fig. 7.

To the south of the Poros Building the bedrock of the hillside continues scarped back toward the east to a distance of more than half the width of the court, about ten

¹¹⁵ See *Hesperia*, XX, 1951, pp. 127-28.

meters from the west line of the building. The area between the scarp at the east and the drain at the west, with the Poros Building to the north and House K at the south, was occupied by a simple house or workshop, J. Its west wall is preserved running for a distance of 5.30 m. beside the old roadway, but set back a meter or so from the line of the Poros Building. This west wall of the house returns at either end toward the east; parallel to it and 3.90 m. away at the east is a fragment of a wall which may have divided the house into two rooms. The south wall of the house runs eastward to a distance of 5.40 m. from the corner before breaking off; it may have continued eastward to the scarp in the hillside. Entrance to the house was through a doorway 1.20 m. wide in its south wall, near the corner. The remains, then, suggest a long rectangular house divided by a cross wall into two rooms at east and west. To the north there was a gap or passage between the corner of the house and the south wall of the Poros Building, which was later blocked. To the south also there was a narrow passage between Houses J and K, doubtless left to give access from the street at the west to House K, whose door lay in its northeast side. The remains of House J are scanty and need be noticed only briefly; the walls are preserved above the rough bedding course in only one short stretch at the north. The house was built early, perhaps in the first half of the fifth century and before the Poros Building existed. The filling of a pit through the floor of House J produced pottery of the same date as that from under the Poros Building, suggesting that House J was abandoned at the time of the building operations to the north. It is probable, indeed, that the area of House J was taken over as a sort of annex to the Poros Building. At the west a wall bedding cut in the bedrock continues the line of the west wall of the Poros Building southward, in front of House J. All the stones which lay in this wall bedding have been stolen except two at its south end (Pl. 75a). There, two blocks are still in place: a large squared block of limestone laid on its side, where its width just fits that of the bedding, and on it a squared block of conglomerate. The wall end is later than the north wall of House K, which was cut away to make room for it; it is covered, as appears in the photograph, by a retaining wall of Roman times which followed the line of the north wall of K. Our information about this heavy foundation wall is not very satisfactory: all we can say is that the heavy bedding stone exactly fits the cutting in bedrock made to receive it, and that the cutting runs north as far as the southwest corner of the Poros Building and on the same line as its west wall. Whether this wall formed the west boundary of an annex to the Poros Building, or exactly when it was put in, we cannot say; in this area the Byzantine trench went deep, and all stones of value were removed.¹¹⁶

¹¹⁶ The east wall of the drain, which stands to its full height immediately to the west, was not plundered because it was covered above by the concrete construction of the Roman bath, which the Byzantines thought it too much trouble to try to break up. The north wall of House K, and the Roman retaining wall over it (which, indeed, covered the only blocks still in situ of the wall in

HOUSE K

Plan, Figs. 1, 7, 16

House K, a workshop, stood in a great cutting in the bedrock of the hillside to the south of the Poros Building and House J. The cutting had evidently been made for some other purpose and never used. The cutting may have been made for the

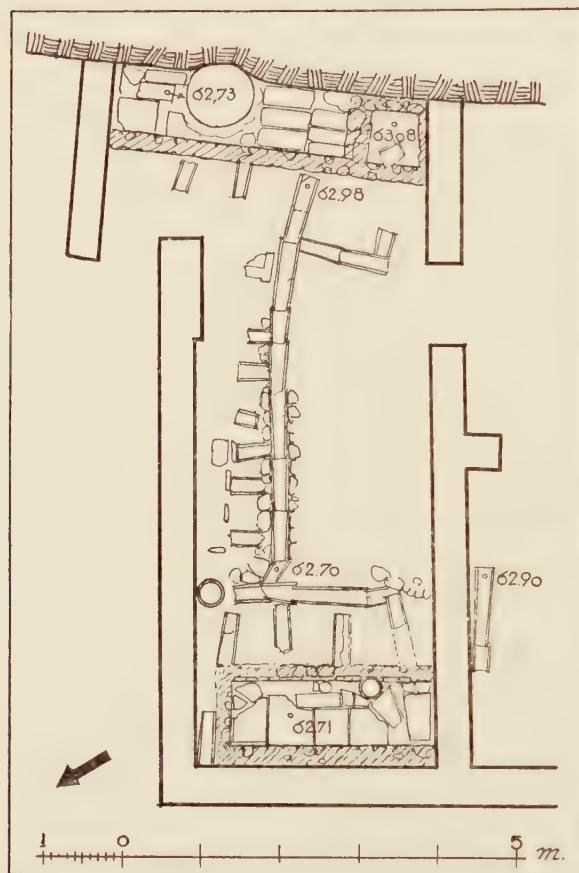


Fig. 16. House K: Plan of North Rooms and Tile Water Systems of Later Fourth Century.

corner of a building; the bedrock was scarped back, leaving a levelled corner with vertical faces of cut rock to east and south, meeting at approximately a ninety degree angle at the corner. Outside this scarp in the hillside to east and south, and obviously

question) lay just beyond the southern margin of the Byzantine trench. The well in House J was probably originally Hellenistic or Roman, since it was tiled; but it had been reused in Byzantine times and produced coarse Byzantine pottery to bottom.

belonging with it, lay another cutting higher on the slope (Pl. 75b). This took the form of a wide shallow trench flat at the bottom, perhaps intended as a wall bedding. The outer cutting lay parallel to the inner at the east 0.60 m. from it, at the south only 0.40 m.; its width at the east was 0.80 m.; at the south somewhat narrower, only 0.70 m. The westward extent of the cutting at the south could not be followed because it was later cut through by the Roman drain. The purpose for which these cuttings were made is not known; it is possible that the Poros Building was planned to stand here, and that after the site had been partly prepared it was decided to shift the position of the new building farther toward the north. House K, which eventually occupied the abandoned site, seems to have been built not earlier than the second half of the fifth century as late or later than the Poros Building itself.

The abandoned cutting, then, was occupied by squatters who built House K perhaps at first as a dwelling, though it later became a marble workers' shop. The west wall of the house bordered the roadway in the bottom of the valley opposite Houses C-D to a distance of 8.60 m.; it was built with a slight outward bend at its south end, perhaps in order to make the southwest corner a right angle. The corner itself is preserved, and a part of the south wall, to the south of the Roman drain. Most of the south wall is missing, destroyed by the Roman drain; if it continued on the same line as the piece preserved at the west, it must have fallen just outside the outer south cutting in bedrock. The north wall of the building, and an east-west interior wall parallel to it and 3.00 m. to the south, were carried eastward from the street wall to the face of the bedrock scarp at the east, a distance of about 8.40 m. The area thus enclosed was further divided by a north-south crosswall, leaving four rooms. These were connected by doors, one between the two rooms at the east, one between the two at the south, and one between the two rooms at the north; there was no direct communication between the northwest and the southwest rooms. We found no evidence as to how the house was closed at the east; the scarp in the hillside stood to a height of almost two meters, but was interrupted by a sort of shelf in which lay the wide outer wall bedding to the east of the main cutting. Presumably the east wall of the house stood on the bedrock between the inner cutting and the outer wall bedding, where there was a ledge 0.60 m. wide; if so, however, no trace remained of it.

The walls were built of limestone, carefully trimmed and fitted (Pl. 75c, d) to a height of 0.60 m.; their smoothly finished tops served as socles for an upper construction of mud brick. Their thickness was 0.45 m., as was that of the walls of the houses to the west of the street. Evidently the walls had all been built at the same time, but in sections, and by two masons. Neither the north wall nor the interior east-west wall was bonded into the west wall of the house at its west end; both abutted against the back face of the west wall, which had evidently been built first. The north-south interior wall was also built before the two east-west walls; its north end was visible in the face of the north wall of the house, which evidently had been built in

two sections, one to the east, the other to the west of the crosswall. The eastern section was somewhat thicker than the western; at its east end lay the door of the house, about 1.50 m. wide from the end of the north wall to the bedrock scarp at the east. The wall was finished off at the west of the door by a good jamb block, turned to cover the thickness of the wall and with a good finished face beside the door. No trace of a jamb was found at the other side, though its position was cut through by a Roman well; instead, another wall lying farther to the north and with a slightly different orientation seems to have served as a screen across the doorway at the north. The approach to House K from the street at the west was through a narrow passage left between it and House J, along its north side and so into the house by the door in its northeast corner.

The internal wall which ran from east to west was also built in sections, which did not carry through on an absolutely straight line. The western section ran from the west side of the house to the wall which divided it from north to south; the second section ran east from this dividing wall to the doorway; the third lay to the east of the doorway, as far as the scarp. The north-south interior wall was already built when the east-west one was made; the ends of both the sections of the latter abutted against its east and west faces. Thus it would appear that in building the house the north-south walls were made first, and then the east-west ones filled in between them. Doubtless two masons were employed, and each built separate sections. The difference in style between the north wall and the east-west internal wall (Pl. 75c, d; Fig. 17) is striking: the former was made with large stones very little trimmed but laid with their edges tangent, and a minimum of small stone filling. The latter was made with large stones somewhat more carefully trimmed, but set apart, the gaps between them filled with stacked work and masonry of small stones carefully fitted. The interior wall resembles the peribolos of the Tritopatreion at the Kerameikos, dated by Wrede in the second half of the fifth century.¹¹⁷ The walls of House K, though differing between themselves in method, were all equally carefully made, with tight joints well fitted and no filling of earth between the stones. It is surprising that the laying out of the house was done so carelessly, while such pains were expended in the building of the various sections of its walls.

We could not see the outer face of the west wall, which fronted on the street, because the drain wall passed immediately in front of it. Provision had been made for the drainage of the house, however, in the southwest room by leaving a double opening for the water to pass through into the street. The double hole was made by putting a small pillar-like stone in the middle of the opening; the stone served to support the middle of the large limestone block which spanned the opening above (Pl. 76a). In the same room we found evidence for the date of the construction of

¹¹⁷ Wrede, *Attische Mauern*, no. 112.

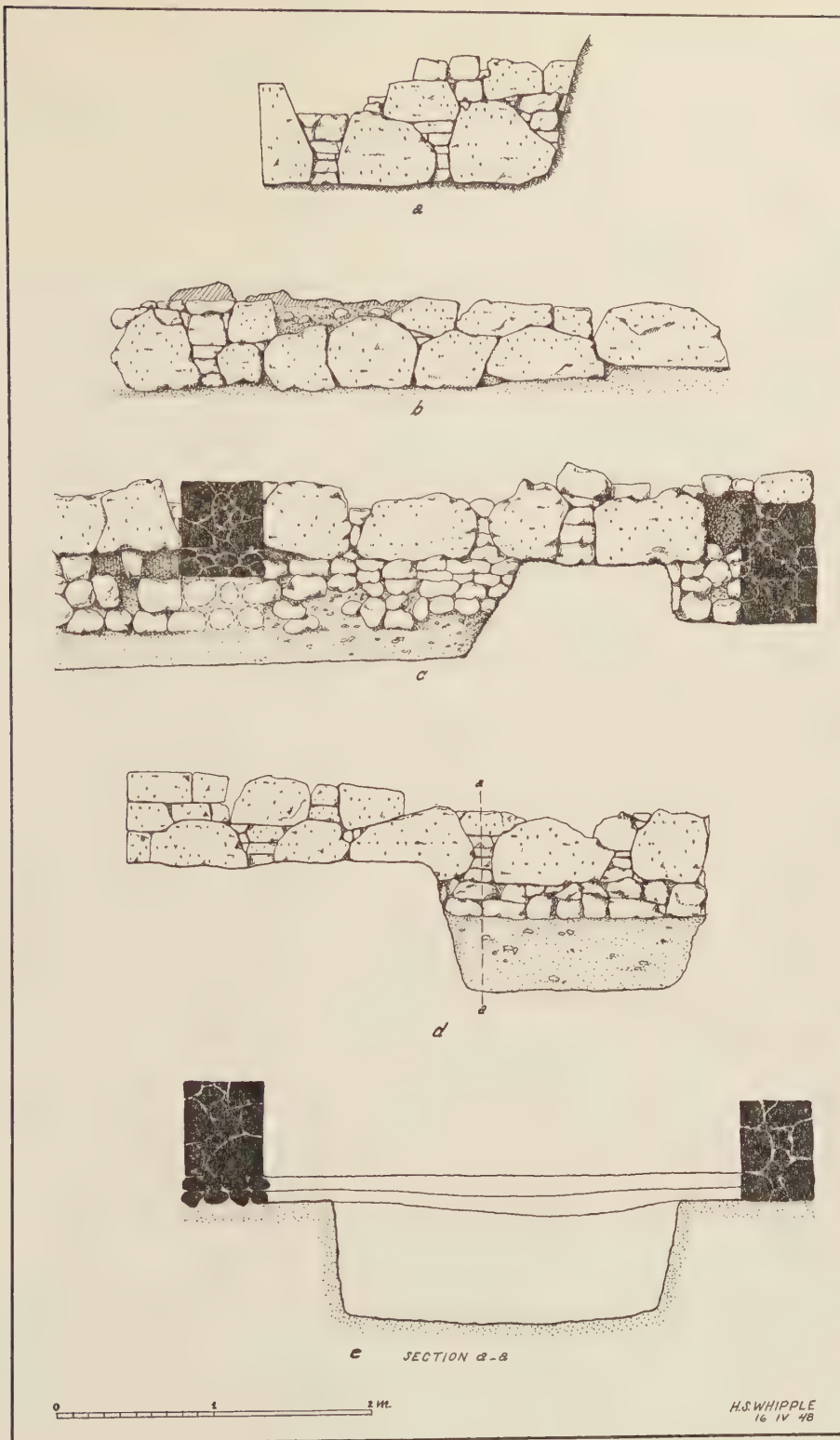


Fig. 17. House K: Elevations of Walls and Section through Northwest Room.

- a—Door Jamb and East End of Long Interior Wall.
- b—Outer Face of North Wall of House, West End.
- c—Inner Face of West Wall of House, Showing Drainage Outlets.
- d—Western Section of Long Interior Wall: North Face.
- e—North-South Section through the Northwest Room, Showing Pit and Successive Floors.

the house: the fill below its first floor contained many small chips of limestone, doubtless made when the wall blocks of the house were trimmed on the spot. The pottery from this filling was of the middle to the third quarter of the fifth century; the house was evidently built at some time in the third quarter, after the Poros Building had been put up at the north.

It was evidently intended as a dwelling with four rooms of which one, which lay at the northeast and which contained the well, may have been an open court. The building was soon turned into a workshop in which marble cutting was done. With the change, which took place early in the fourth century, various adjustments were made: the two rooms at the south were made into one by taking down all of the wall between them to the south of the door, leaving the north jamb as a sort of buttress against the wall at the north, and the well was filled. The house now had a court at the northeast, in which marble was cut, and a long court at the south, in which the marble chips and dust were apparently stored. The time at which this transformation took place was given approximately by the filling of the well. At the bottom lay a couple of coarse water jars of the late fifth century, which had evidently been lost down the well at the end of its period of use. Also at the bottom lay a mass of broken tiles fallen from the curbing of the well itself. We were able to piece together one of these complete (Pl. 77a); it is of interest because it is from the earliest tiled well so far found in the Agora, and has instead of the usual lunate lifting-hole common in the fourth century and thereafter, a large square lifting-hole.¹¹⁸ The well had been filled all at once with a miscellaneous dump which contained some marble chips, a great many animal bones and some sawn-off ends of animal bones such as were found in House F and to the north of it, and a quantity of very fragmentary pottery of the late fifth century. The fill in the mouth of the well, evidently thrown in after the deep dump had settled, was slightly later; in addition to the oinochoe and the epinetron published below, it produced twenty-eight loomweights, a combination which suggests that some of the dowry of the lady of the house was thrown into the well.

1. *Red-Figured Oinochoe*. Pl. 77c, d.

Inv. P 18556. H. 0.12 m. Diam. 0.094 m.

The handle and a few small fragments, including part of the hare and of the upper part of the woman's figure, filled in with plaster. Ovule border above and below the scene. The underside reserved. At the lower left corner of the scene, a jug on the ground. Eros, running right, bending forward, is about to throw a ball to a woman who faces him. Between the two a hare leaps toward the woman. Added

clay for Eros' fillet and ball, and for three ornaments to the woman's hairdress. Compare a fourth century lid, *Compte Rendu*, 1880, pl. 5, 1 (= Weicker, *Seelenvogel*, p. 167, fig. 87 = Buschor, *Musen des Jenseits*, p. 55, fig. 42). For the date of this last, compare the white Eros on the lid in Stuttgart, Schefold, *Untersuchungen*, pl. 15, 44, which is somewhat later. Compare further a lid in Brussels, *C.V.A.*, pl. III I d, 4, 3, contemporary with such works by the Meleager painter as the calyx krater

¹¹⁸ Inv. A 1370. H. 0.573 m. W. (chord) 0.89 m.

Würzburg 523 (*A.R.V.*, p. 871, 6), see also a bell-krater in Naples assigned to the painter of the Oxford Grypomachy (*A.R.V.*, p. 877, no. 5; Schefold, *op. cit.*, fig. 79). The fleshiness and proportions of the male body appear on some of the Jena painter's work, especially on the cup in Ensérune, *A.R.V.*, p. 881, 33. The woman's pose, however, is not one which long outlasts the "sub-Meidian," and her face and

dress can be paralleled on many small vases from around the turn of the century and shortly after. About 390 B.C.

2. *Unglazed Epinetron*. Pl. 77b.

Inv. P 18605. L. 0.237 m. W. 0.12 m. H. 0.088 m. Two small pieces missing.

Handmade of micaceous cooking-ware fabric, unglazed and undecorated.

The filling of the well gives us approximately the time of the changeover in the use of House K from dwelling to workshop. The northwest room seems to have remained roofed and to have been used as a storeroom, perhaps in the same way as was the shed in House G. At some time, probably just before the changeover was made, a great pit was dug through the floor of this room. The sherds from the earth thrown in to refill it were late fifth and very early fourth century; after the pit had been refilled a good flooring of clean clay was laid over the new surface. The refill in the pit settled, however, and more fill had to be thrown into the resultant hollow, and a new clay floor laid. This seems again to have been done before the fill in the pit had finished settling, and a third and final filling and flooring brought the floor of the room to the desired level surface (section, Fig. 17, e).

The actual marble working seems to have been done in the northeast room of the house, its old court. Here were found many layers of fine marble chips and dust, tramped hard. The new long court at the south seems to have been used for the storage of marble chips. In it rough retaining walls were made from time to time, to form bins of a sort, into which the chips were thrown, either to get them out of the way or to store them until some use could be made of them. It has already been noted that large pithoi set through the floors of the Poros Building after it had been given over to the stone cutters were used for the storage of marble chips; apparently they were saved to be put to some use, perhaps to be ground to dust for the making of marble stucco, or perhaps to be burned for lime; some, as we have noticed above, were used for patching the street surfaces. Whatever may have been the purpose for which they were saved, production in House K far outstripped consumption. The first retaining wall was laid across the southeast corner of the building, in a curving line from its east to its south side; later, as the "bin" behind it filled up, more retaining walls were made running outward from the first (Pls. 76a, b) and apparently closed at the north by a retaining wall parallel to the first, which we did not find preserved. This series of compartments seems to have been made from time to time as needed when the earlier ones had filled; finally the corner outside the north door to the east was filled with marble chips held back by rough retaining walls to west and south. The chips themselves were all of white marble, presumably Pentelic; none

were noted of the coarser-grained island marbles. No unfinished or damaged discards were found among them to show whether this workshop had made herms, sculpture or furniture. The sherds found occasionally among the marble chips in the bins in which they were stored were of the late fifth century and well into the first half of the fourth; House K was apparently used as a shop for the working of marble for about a generation, from some time in the first quarter until about the middle of the fourth century. The change-over from dwelling to workshop was made shortly after the Great Drain was built; some time near the middle of the fourth century the building was altered and put to yet another use which we have not been able to define.

This change came at about the same time as the later altering of the houses on the west side of the drain, A and C-D. As at the west the change involved chiefly a raising of the level, perhaps in consequence of floods in the drain. The floor level of House K was raised by more than half a meter, and its internal walls were taken down altogether: the north-south wall was completely buried under the new floor, and all the superstructure of mud brick was taken from the stone socle of the east-west one. The top of the socle lay at the level of the new floor; its upper face shows in places considerable wear from traffic which passed over it, acquired while it lay exposed in the new floor. Presumably the north and west walls continued to enclose the area, which must now have been unroofed and open to the sky. The north wall of the oldest house was later used as the foundation for a retaining wall of Roman times bedded directly on it, wherefore we have no evidence as to its state in the latest period of House K; but we assume that the area remained closed at the north. In order to raise the level a dump of earth and marble chips was thrown in to the full height of the central east-west wall socle; the date of the raising of the floor could be established at about the middle of the fourth century from the pottery found in this filling. Included among the sherds were fragments of plastic lekythoi, figurines of the early fourth century, and some pieces of moulds which suggested that a coroplast's workshop was already in operation near by. In addition to the two characteristic pieces published below a number of fragments of Type VII lamps of the earlier glazed variety characteristic of the first half of the fourth century¹¹⁹ served to fix the date of the new arrangements made in House K.

1. *Black-Glazed One-Handled Kantharos*. Pl. 77e.

Inv. P 18566. P. H. 0.072 m. Diam. at rim 0.062 m.

The foot missing, and chips from the rim and wall. Broad shallow rounded body and narrow upper wall, slightly concave in section; swollen rim. One handle, shoulder to below rim. Lustrous glaze, fired grey to red, and much worn.

A comparable kantharos: *Olynthus*, XIII, no. 511, pl. 188.

2. *Black-Glazed Skyphos*. Pl. 77f.

Inv. P 19560. H. 0.104 m. Diam. at rim 0.118 m.

One handle missing and the adjoining rim. Lower body drawn in above ring foot. Glazed

¹¹⁹ Broneer, *Corinth* IV, ii, *Terracotta Lamps*, pp. 45 ff., pls. 111, 120.

over all except bottom, decorated with ring and dot.

first or early second quarter of the fourth century.

Comparable to *Olynthus*, V, 973, pl. 185; late

Over this new floor level in the north part of the house (i. e., over the two north rooms) was laid a system of tile basins and channels. At east and west were large shallow rectangular basins floored and edged with tiles (Pl. 78a-c; Fig. 16). The basin at the west was 2.60 m. long from north to south, and 0.95 m. wide, set against the west wall of the house. Four inverted roof tiles ran eastward from its edge, perhaps as overflow outlets, to a line of tiles which ran parallel to its east side, and which carried the overflow northward. At the east side of the room there were two basins set against the east scarp of the hillside, a larger one at the north, 2.90 m. in length, and a smaller one at the south, which overlay the old well of the house. The small basin at the south had one overflow channel toward the west, the larger one, three; these were connected by a line running parallel to the basin at the west. A central line of drain tiles connected the two overflow channels to west and east of the two basins, running westward, with a jog to pass the north end of the western basin, to empty into the drain at the west through a hole in the corner of the house wall. The system resembled in plan an H with elongated horizontal bar; the vertical sides collected the overflow from the basins at either end, the central cross piece carried it off into the drain at the west. But along the north side of this central link lay six more short roof-tile drains, evidently intended to bring liquid into the central line. The depth of the western basin was 0.25 m.; it was made from all sorts of reused material, as were also the lines of drains connecting and draining the basins. Square floor tiles of two sizes, measuring 0.47 m. and 0.57 m. on the side respectively, were used; some of these had their vertical faces grooved horizontally, perhaps so that they might be bound together with a filling of clay in the grooves, and others were decorated on their upper faces with crosses of glaze stripes drawn from corner to corner. Fragments of pan tiles and well tiles, some of the latter perhaps from the old house well, were used as covers over the channels, which were made of curved roof cover-tiles, laid upside down. Two of these were complete, with a full length each of 0.95 m. All of this reused material was rather loosely thrown together without mortar or binding of any sort. Only the main lines of drainage—the two verticals and the horizontals of the “H”—seem to have been covered; the short overflow channels from the basins, and the six tributaries running from the north into the main line, seem never to have been covered. The whole gave a very makeshift impression, as if thrown together for daily use in some technical process and carelessly patched and repaired as it became necessary. It is possible that this complex was connected with a terracotta factory which lay to the south. The basins at east and west may have been used for the cleaning and mixing of clay. In modern potteries shallow rectangular basins are

used, usually a series of them at different levels. The clay is mixed with water and the liquid strained off into another basin at a lower level, where it is again mixed and stirred and strained off. Finally it comes to rest in a wide shallow basin where it is allowed to dry until pieces can be cut off as needed for the making of the pottery. The basins at the east and west of our complex may have been used for the cleaning and drying of clay. This would perhaps call for another still larger basin at the north, of which the overflow was taken off by six outlets into the main line of drainage. No trace of any such basin was found; but without it the six side channels seem inexplicable. It must be remembered that the retaining wall of Roman times came to below this level, and that the entire area to the north of it (over House J) had been cut away in Byzantine times.

To the south of the complex of drainage tiles and basins, in the two southern rooms of House K, a line of tile drain was laid shortly after the middle of the fourth century, which apparently brought waste water from the houses above the scarp at the east and emptied it into the Great Drain (Pl. 78d). As a collecting pit an old well was used; it was filled to the level desired, then a tunnel was dug under the bedrock toward the west, which emerged just to the north of the southeast corner of House K. The drainage was carried in—or rather, under—a line of half elliptical tiles which covered it; there was no lower series, nor any terracotta channel inside. This series of tiles was put into a trench made in the marble chip fill of House K. The line it takes is of interest in that it must have entered the Great Drain at about the point where the later Roman drain was brought into it, suggesting that here an inlet of some sort had been left in the east side of the drain when it was built. This line of drainage seems to have continued in use until some time in the third century when the collecting pit in the hillside above was filled up.

The area occupied by House K was covered in Hellenistic times by a house or shop of some sort, of which only foundations remained. The packing of small stones on which its walls were bedded followed the line of the interior wall which had divided House K into halves, to north and to south; north-south cross foundations were found at east and west (Pl. 78d). None of the superstructure remained; the whole was buried under a filling thrown in to raise the level when a terrace wall was built on the line of the north wall of House K in Roman times, probably in the second century A.D.

HOUSE L

Plan, Figs. 1, 7

House L lay immediately to the south of K, facing on the roadway opposite House C. In the area of House L the bedrock rises rapidly toward the east and south, so that only its northwest corner, with parts of its north and west walls, were at sufficient depth to be preserved. The north wall, like the south wall of House K, was

cut through by the Roman drain; its line is continued to the east of the drain, however, and part-way up the hillside, by a short stretch of early wall which may well have belonged to House L. This wall is set against a scarp in the bedrock, which turns south at its east end; the wall itself may have also turned south, following the scarp, to serve as an east wall for House L, which would in that case have had a depth of 12 m. from the street at the west. The west wall of the house is preserved to a length of 7.60 m. southward from the corner; then it breaks off, and we have no way of knowing how far southward House L extended. In front of this wall, however, we found a series of four pits cut into the bedrock, which slopes rapidly down to the drain. In the bottom of each of these pits lay a flat stone which had probably been laid as a bedding for an upright wooden post or beam, perhaps the supports for a balcony in front of the house. The walls of House L were of the usual neat polygonal limestone masonry, through a good part of their extent built against a scarping-back of the hillside made for them. The house was built before the south branch of the Great Drain was made; all of its lower face was covered by the fill thrown behind the east drain wall after it had been built. The four pits in which wooden posts had been bedded were filled with the same dump of greenish sand, suggesting that the balcony or whatever it was that they supported was abandoned at this time. The pottery from this filling not only serves to help in the dating of the drain, but it also proves that House L was already in existence when it was built. The greenish sandy filling was the same as that used in the filling behind the west drain wall, under the corner of Room 4 of House C, and the pottery was closely similar. Although we found no joins between the sherds from the two fillings it remains most likely that they came from the same place: from the filling of the older drain channel which was dug out when the new drain was made. The most characteristic and significant pieces from this filling have been selected and described below by Peter Corbett.

1. *Fragmentary Red-Figured Epinetron*. Pl. 79.

Inv. P 18283. Max. dim. 0.137 m.

Three joining pieces preserve part of one side, with the finished edge, and part of the curved knee-piece. At the right of the figured scene is a vertical border composed of an oblique palmette scroll. On the side is a woman seated to left in a chair. She wears an Ionic chiton and a himation wrapped around her waist and legs; around her head is a fillet. In her left hand she holds a flower, in her right an alabastron. Before her stands a woman in a Doric chiton, whose right elbow rests on the

cushions of a couch. Partial relief contour; white for the flower.

Comparison with the work of the Cassel painter (*A.R.V.*, pp. 674-5) suggests that this vase is to be dated in the early thirties. Compare the vertical border with the palmette scroll on an onos by the Clio painter (*A.R.V.*, p. 673, 20).

2. *Fragment of a Red-Figured Mug* (oinochoe type 8). Pl. 79.

Inv. P 18273. Max. dim. 0.086 m.

A single fragment, broken, all round, giving part of the wall and the start of the neck. A

youth to left, wearing chlamys and boots, with a spear in his left hand; he extends his right hand toward a figure seated to right, who uses his cloak as a cushion. Reserved ground line. No relief contour; glaze fired grey in the background to the figured scene. Contemporary with a stemless cup in Berlin (2728; *A.R.V.*, p. 742, IV: "These (cups) stand between the Codrus painter and Aison: the Berlin stemless nearer to Aison, the others to the Codrus painter.")

3. *Red-Figured Cup Fragment*. Pl. 79.

Paralipomena to *A.R.V.*, p. 623; "Koropi painter, add as No. 15."

Inv. P 18281. Est. diam. of rim 0.165 m.

Three joining pieces give part of the rim and wall, with one handle root. Nothing remains of the interior decoration. On the exterior, beside the handle ornament, is a youth to right. He is nude save for a cloak thrown over his left shoulder; in his left hand he holds a javelin. Comparison with the painter's cups in Brussels and Berkeley (*A.R.V.*, p. 623, 1 and 9) shows that the object in his extended right hand was a strigil; below it is the outstretched hand of another figure. Partial relief contour; good glaze.

4. *Red-Figured Bell-Krater Fragment*. Pl. 79.

Paralipomena to *A.R.V.*, p. 779: "painter of Munich 2335: add, as no. 33 bis (very late)."

Inv. P 18291. Max. dim. 0.098 m.

A single fragment from the upper wall. A wreathed maenad with a thyrsos looks left toward a bearded satyr, part of whose face survives at the right of the fragment. His right hand is extended to grasp her shoulder. Relief contour for the faces; white for the leaves of the maenad's wreath.

5. *Red-Figured Bell-Krater*. Pl. 79.

Inv. P 18274. H. 0.123 m. Diam. 0.133 m.

One fragment of rim and one handle-bar missing. On A) a woman wearing a Doric chiton runs to right and looks back to the Eros who flies in pursuit. Between the two figures is a volute plant. On B) a draped youth to left, holding a strigil. On the rim, and below the figured scene, an ovule border. The inside of the handles, and the space between the roots, reserved; so also the vertical face of the foot. A scraped ring at the junction of foot and body. No relief contour. When the background was filled in, Eros' feet and the tip of his wing were covered over. Glaze fired red in places.

Compare two small bell-kraters in Würzburg (Langlotz, *Griechische Vasen in Würzburg*, pl. 213, 524 and 525; there dated "um 420" and "um 410" respectively), and the reverse of a krater in the Louvre (G 502; *C.V.A.* 5, III Id, pl. 35, 8); with the woman on A) compare a fragment from the Grave of the Lacedaemonians (*Arch. Anz.*, 1937, p. 193-4, fig. 13, above, left). The shape also argues a date before the end of the fifth century.

Two red-figured fragments from this deposit have already been published (*Hesperia*, XVII, 1948, pl. 67, 4; pl. 68, 6; see also pp. 188, 190). The first, from a calyx-krater in the manner of Polygnotos (*Paralipomena* to *A.R.V.*, p. 682; "No. 6 bis") is of the same period as the epinetron, No. 1; the second seems contemporary with No. 2 in this catalogue. The figured vases would suggest that the deposit originally accumulated in the thirties and twenties of the fifth century, but the presence of the bell-krater, No. 5, shows that the closing date is toward the end of the century. The black-glazed pottery was fragmentary; the most significant pieces were from bosals, and, while they confirm the fifth century dating, they do not contribute to greater precision (see *Hesperia*, XVIII, 1949, pp. 331-332, No. 77).

The corner of House L was occupied by a floor of terrazzo work laid with a definite slope toward the west, and apparently turned up at the edges to hold liquid.

To the east of this floor lay three cuttings in the bedrock, one of which was lined with waterproof cement and a second occupied by a large terracotta basin or lekane. The third was a simple cutting, but cement lining may have disappeared from its sides. The filling in these pits was late Hellenistic, that over the floor itself was late Roman. Floor and pits, however, must have been connected and used in the same operation, and since the pits were out of use by late Hellenistic times we must conclude that they were made earlier, and the floor with them. It is most probable, though not susceptible of proof, that the terrazzo floor was made about the middle of the fourth century when similar floors were being laid down in Houses C, D and F to the west of the drain. If this is so, then the floor must belong to a mid-fourth century period of House L, and some manufacturing operation was carried on in the house which made use of the floor and of the pits and basin in the bedrock to the east of it. We know that somewhere in the neighborhood a terracotta factory was in operation from the fourth century down to Roman times; quantities of fragments of figurines and moulds were found, and even bits of small bowls which had contained the colors with which the figurines were painted: red, blue and lavender. Although these characteristic bits of debris from a workshop making terracotta figurines were scattered well over the whole southeastern part of the area, the greatest mass of them was found just to the east of House L in a filling which had been used to fill up a gap between the west wall of House N, which lay beside the Roman drain, and a deep cutting-back of the hill-side which extended a couple of meters farther to the east (plan, Figs. 1, 7). This dump must have been brought from near by, and it is tempting to associate it with the apparatus in House L, and perhaps the basin and drainage system in House K, which seem well suited to the working and preparation of clay. A source of water for the factory lay just to the southeast of the floor in a well of unusually great diameter. We could not dig this well to bottom, as the bedrock was here soft and dangerous; its filling as far as we dug (to—9 m.) was entirely of dug hardpan, probably thrown in to fill the well when the channel of the Roman drain was cut. House L, with its own source of water, had also what seems to be suitable equipment for a terracotta factory, very similar to that of the recently published terracotta factory in the Potters' Quarter at Corinth:¹²⁰ sloped floor, pits in bedrock lined with hydraulic cement, terracotta basins, etc. The figurines found here and in the immediate neighborhood were made over a long period, from the fourth through the first centuries before Christ, but all traces of the establishment, excepting only the floor and the pits, were wiped away.

¹²⁰ A. N. Stillwell, *Corinth*, XV, i, *The Potters' Quarter*, pp. 16-17, 39 ff. Sloped floors with up-turned edges, and pits in the bedrock in which clay was found, seem to have been used in the working of clay, and resemble our terrazzo floor and bedrock pits. The figurines, moulds, etc. from our area will be the subject of a study by Dorothy Burr Thompson; hence none of them are published here.

HOUSE M

Plan, Figs. 1, 7; Section, Fig. 18.

Opposite House A, to the east not only of the Great Drain but also of the deep earlier drainage channel which, as we have seen, must have predated the building of House A, lay the remains of another house or workshop, M, in part earlier than the drain and in part contemporary with it. Directly opposite House A and parallel to it was uncovered the west wall of a small house or room 7.70 m. in length, with a return toward the east at either end. These returns, the north and south walls of the house, break off where they meet the sloping hillside which rises toward the east, and no other remains of this phase of the house could be traced. The few sherds found in undisturbed filling behind the west wall were of the late sixth and early fifth century; the wall was probably already standing when the channel of the earlier drain was cut.

To the south of this room lay a great shaft and well cut deep into the bedrock, along the east side of the early drain channel. The rectangular shaft was carried down to a depth of 5.75 m. and its sides, lined with carefully built walls and cut bedrock below them, measured 3.60 m. in length from north to south, and 1.40 m. in width at the bottom. The longer sides, however, were made with a downward slope or batter so that the width at the top was only 1.09 m., spanned by flat cover slabs laid across from side to side. The masonry was carried only about half-way to bottom. At the east side (section, Fig. 18) there were four courses of squared blocks, with one block of a fifth course below at the north and two at the south. The north wall was of four courses, the west of only two at its north end, deepening to four at its south. At the south two courses at the top were supported on rubble masonry below, and a narrow ledge or shelf projected in front of the bottom of the wall. At the other sides the bedrock was trimmed to flat vertical faces flush with those of the masonry walls above. Near the south end of the shaft a well was cut through its floor, 1.20 m. in diameter and lined with drums of tiles. An opening was left in the cover slabs of the shaft above the mouth of the well, its south side curved, its north squared. A great natural cave or hollow opened in the bedrock to the southwest, connecting with the shaft at its bottom.

The well was dug to -24.85 m. without finding bottom; the flow of water was so great that it seemed hopeless to try to bail it out to greater depth. All the filling to this depth, as well as in the shaft above and in the cave at the southwest, was late Roman of the fourth and fifth centuries. Of eleven coins found in the well two were identifiable as fourth century Roman; one was of Theodosius I (A.D. 379-395) and four were of Honorius (A.D. 395-423).¹²¹ Well and shaft had apparently continued in use, or had

¹²¹ The shaft was left open at the close of the 1940 campaign. When it was cleaned out again in 1946 a sample of a modern accumulation was recovered: several dozen tin cans; fragments of several lekane; four or five yaourti bowls, broken; one bicycle wheel and two worn-out tires; a

been found and reused, late into the Roman period. This no doubt was because of the excellent supply of water it afforded. It must have been built in order to store water, using the natural cave at the southwest as a supplementary storage chamber. The shaft was built at the same time as was the Great Drain, the beginning of the fourth century B.C.; this was indicated not only by the style of the masonry but by a

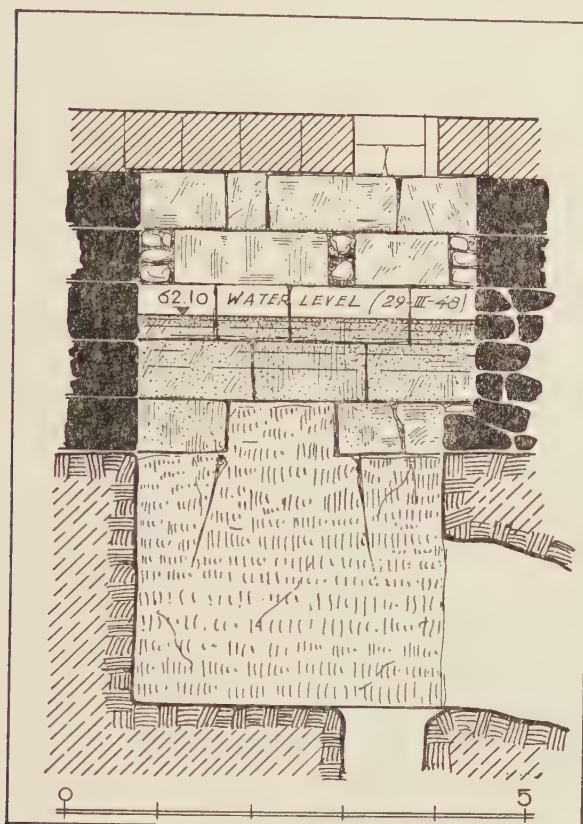


Fig. 18. Shaft under House M: Section and Elevation of East Wall, Showing Cave at South and Mouth of Well.

little undisturbed filling at the bottom of the chamber itself at one corner; and also from crannies in the cave, where the sherds were all of the late fifth century. The west wall of the shaft, moreover, was continued toward the north by an extension carefully built and fitted of small rubble (Pl. 82c). A short distance to the north of

corner of iron pipe; an iron hoop, perhaps from a wagon-wheel; a bicycle sprocket and fork; a tin pill-box, made in Hamburg; two empty shoe-polish tins; a decrepit broom; a mortar shell; and two clips with 9 mm. cartridges. Perhaps the relation between a modern and an ancient well accumulation would bear pondering.

the shaft this wall curved westward, then again westward to bond at its west end into the back of the drain wall. In its course it passed right across the line of the earlier drain channel, blocking it. The ends of the shaft which underlay the upper part of the wall, which was carried over the west ends of the cover slabs, were marked by a large orthostate in the construction, one over each corner. All the filling behind this wall to the south was of the late fifth century; it was evidently thrown in at once to the west and south of this wall and behind (east of) the drain wall in order to level off the whole area at the time of the construction of the drain. A basin or lekane of terracotta set against the face of this wall at its bend suggested some sort of manufacturing operation; a tile conduit brought water to it. The basin seems at one time to have been broken; it was raised, the break carefully mended with lead clamps, and then it was put back. The copious supply of water from shaft and well seems to have been used throughout antiquity in some sort of a workshop above. The lekane already mentioned belonged to the earliest period; to a later, probably Hellenistic, period belonged a floor of pebbles in cement laid beside the shaft at the east. The edges of this floor, which recalls that in House L, could be traced, with a door in the south side; but the Roman drain, and the still later water channel, had been carried across it (Pl. 82d) and little was left but the floor itself. The latest phase of the workshop was represented by a great square tank of Roman times, built of rubble and cement, with floor turned up at the edges and corners bevelled to hold liquid, no doubt water from the shaft and well immediately beneath. This tank was in use from early in the second century after Christ until the Herulian destruction. It had in all six floors laid successively one on top of the other, probably repairs made when the earlier floors had sprung leaks.¹²² We found no evidence as to the uses to which the water from the shaft and well was put through the long period from the fourth century before Christ to the middle of the third century after; but it would seem certain that it was the plentiful water supply that attracted artisans of some sort to the spot, and kept them there for six and a half centuries.

OTHER REMAINS OF THE FIFTH AND FOURTH CENTURIES

Scattered traces of houses and workshops, as well as other deposits of the fifth and fourth centuries were found throughout the area. On the hillside to the west of Areopagus Street the west wall of Houses N and O had evidently belonged to houses of an earlier period and had been reused by the Roman houses. Where the wall is preserved beside House O it is partly of original early construction, partly a Roman repair in which was incorporated much of the earlier material. Some fragments of walls on the bedrock under Houses N-O probably belonged with this wall to a house

¹²² On the general plan, Fig. 1. This establishment is the one remarked on because of its longevity in *Hesperia*, XVI, 1947, p. 206.

or houses of the fifth and fourth centuries; in the area were several wells, which had been filled at the end of the fifth century, and a cistern of which the filling was evidently a dump containing fifth century sherds, but which had been thrown into the cistern in the third century. Not enough was left of these houses to give even an intimation of their plans, and we may pass over them with a mere mention.

The west side of the Street of the Marble Workers at its bend, later occupied by the western Roman bath (plan, Fig. 1), had been enclosed in the fourth century or early in the third by a peribolos of poros blocks. The line of blocks at the west was in place over a stretch of several meters; to the north of the bath deep Byzantine disturbance had gone to bedrock and broken off the continuation of the poros wall, which may once have extended as far to the north as House G. The curved retaining wall, or peribolos wall, beside the Street of the Marble Workers had evidently been added later, in the third century; it served to enclose the south end, and part of the east side, of the same structure as the poros wall at the west. The builders of the Roman bath, and the Byzantine plunderers, had destroyed all evidence as to the use to which this enclosure had been put.

Somewhat to the southwest on the other side of the Street of the Marble Workers, between House C at the east and the alley running southward at the west, and north of Grave 50,¹²³ a great pit in the bedrock had been filled up in the second quarter of the fifth century, apparently as part of a levelling operation. The dump in this pit was of interest because it produced ostraka in great numbers, 540 in all. Since, however, the filling was brought from elsewhere (perhaps it came from the digging of the earlier drain channel at the east) and contained pottery of the second quarter of the century, it could not be regarded as a closed deposit representing discards from any single *ostrakophoria*.¹²⁴

THE SOUTH BRANCH OF THE GREAT DRAIN

FIFTH AND FOURTH CENTURIES

Much has already been said about the Great Drain because in many places its history is intimately if not inextricably tangled with that of the houses and streets beside it and over it. The drain has not yet been treated as a unit in itself, however; and since it is now the most conspicuous feature of the area, and since in antiquity while it was serving the function for which it had been made it was the most important, a brief resume of its history and construction is worth setting down. Its importance in antiquity is best demonstrated by what happened when it and its Roman successor

¹²³ Cf. *Hesperia*, XX, 1951, pp. 108-9.

¹²⁴ *Hesperia*, XVII, 1948, p. 193. This number was eventually raised by another 40 in 1949 by the tearing out of some later walls which covered a residue of the ostrakon-bearing fill: cf. *Hesperia*, XIX, 1950, p. 337.

were abandoned and allowed to fill: the area began to silt in, until an accumulation five meters deep covered its entire south and central part (cf. p. 138 above, and the section, Fig. 2).

Mention has been made of the natural bed of the watercourse of Geometric times; no attempt was made to control the flow of water so early. We found, in fact, no traces of any artificial drain of pre-Persian times.

The first drain was a deep channel cut in the bedrock between Houses A and M on a line nearly north and south. This channel was 1.40 m. wide to the east of the drain, and cut into the bedrock to a depth of 3.50 m., greater than that of the later drain. Toward the south the channel could be traced, though neither so deep nor so carefully cut as in front of the older part of House M, along the west side of the built shaft under House M, and so southward out of our area. In front of House M where its line gradually converges with that of the later drain the sides of the bedrock cutting were beautifully fresh and clean, and showed no traces of water wear. The freshness of the vertical cut in bedrock suggested that it had been screened from the action of water, perhaps by a wall similar to that of the later drain. No remains of such a wall were found at either side of the cut; perhaps the stones had been removed and used elsewhere when the early channel was abandoned in favor of the new drain at the west. The lines of old and new drains converged toward the north; at the point where they met the older cutting curved somewhat toward the northeast. It could be traced for some distance under the later drain because the latter lay slightly farther to the west, though both followed the same line. The result of this discrepancy was that for some distance there was a ledge of bedrock about 0.30 m. wide in front of the west wall of the later drain, while its east wall was bedded actually on the sand filling in the earlier. The floor levels of the two drains gradually converged toward the north until the cutting for the later drain eventually became deep enough to reach and perhaps cut below the bottom of the earlier; from this point onward all traces of the earlier drain were lost. That the later drain followed the course of the earlier still farther toward the north was confirmed by a curious pocket in its bottom just to the north of House E and beside the north wall of the court of the Poros Building, where some of the sand filling of the earlier drain still lay undisturbed. In this pocket were found 172 ostraka, almost all of the *ostrakophoriai* of the years immediately preceding the Persian Wars.¹²⁵ This, then, was the line of natural drainage in the first half of the fifth century. The first channel seems to have been cut in bedrock at the south at some time around the middle of the century or earlier, certainly before the building of House A, which we have dated around the mid-century.

We found no drain filling in the channel as early as this. In order that the drain should fulfill its function it could not be allowed to become silted up, and doubtless

¹²⁵ *Hesperia*, IX, 1940, pp. 301-302; Supplement VIII, p. 395.

it underwent periodic cleanings. The fill found in it was thus the deposit of its latest years, after it had been abandoned and allowed to fill itself. The east wall of the Great Drain formed an effective dam across the line of the earlier channel, and to the south of this dam was found a great depth of fine sand which had formed immediately the channel went out of use, and had filled it from bottom to top. The pottery from this deposit has been examined and selected by Peter Corbett, who describes and dates the pieces which he selected as the most characteristic and datable.

1. *Red-Figured Askos Fragment*. Pl. 80.

Inv. P 16998. Max. dim. 0.076 m.

A single fragment from the top; at the left is part of the attachment of the spout. A bull, goring to left. Around the shoulder of the vase is a reserved line. No relief contour; dilute glaze for some internal detail; a glaze wash within.

Compare a fragmentary red-figured askos (Pl. 80, 5) which is by the same hand.

Inv. P 6506. Max. dim. a) 0.092 m. b) 0.065 m. Diam. est. 0.092 m.

From a well on the south-east slopes of the Kolonos Agoraios, which contained pottery of the third quarter of the fifth century with a lower limit of *ca.* 425 B.C. Two non-joining fragments, both mended. On a), a bull, goring to left; on b), three feet of an animal to right. A reserved line around the shoulder; no relief contour; dilute glaze for some internal detail.

By the same hand also, an askos in Cambridge (1/1900; *C.V.A.*, pl. 39, 4). Comparison with the Cambridge askos makes it probable that the animal on fragment b) was also a panther, in a similar pose.

2. *Fragment of a Red-Figured Pyxis Lid*, Type A. Pl. 80.

Inv. P 16997. Max. dim. 0.106 m.

A single fragment preserves part of the flange and the flat top. Tongues and dots on the concave surface between the flange and the rim. On top there is a zone of ovules around the rim, then the figured scene, with a boar confronting a panther. Around the root of the handle was a ring of tongues and dots.

Partial relief contour; dilute glaze for some internal detail.

The glazed lines (as opposed to dots) for the manes and ruffs of the panther and the boar may be compared with the similar rendering on the fawn on an askos in the Ashmolean Museum (*C.V.A.*, pl. 45, 8; dated in the text "About 430-420"; note also the side view on pl. 48, 37); contrast the treatment on such late fifth century askoi as those figured in *Hesperia*, Supplement IV, pl. 130, fig. 97 d, and *Hesperia*, XVIII, 1949, pls. 84 and 85, 19.

3. *Red-Figured Bell-Krater Fragment*. Pl. 80.

Inv. P 18848. Max. dim. 0.059 m.

A single fragment from the wall. Part of the head of a youth to right. Before him is a post or column; at the top of the fragment is the lower edge of some straight horizontal object, perhaps the lintel of a door. Relief contour; dilute glaze for the pupil of the eye and the upper lid, and for the shading on the central zone of the column.

By the Talos painter; the attribution confirmed by Beazley (letter of 27 February, 1949).

4. *Red-Figured Bell-Krater Fragment*. Pl. 80.

Inv. P 18849. Max. dim. 0.093 m.

A single fragment from the wall. The fragment becomes intelligible when set beside a Pompeian wall-painting of the death of Neoptolemos (Herrmann-Bruckmann, *Denkmäler der Malerei des Altertums*, pl. 156; a similar scene on an Italiote volute-krater, *ibid.*, p. 215). The action takes place at an altar, whose top

has a double moulding of ovules and dots; on it the central figure knelt with his left knee, and before it can be seen part of his trousered right leg; the fabric of the trouser is decorated with crosses and dotted circles. One end of his cloak hangs beside his leg; to the right is a sceptre, which is apparently falling to the ground. The upper garment, with its border of ovules surmounted by rays, is best explained by comparison with the costume of Paris on a later vase (Schefold, *Kertscher Vasen*, pl. 2b); it is an Oriental under-tunic, open at the right side, and the inside of the far corner can be seen to the left of the trousered leg. Another figure approaches behind the altar, from the right; he wears thigh-length tunic, with a border of framed palmettes and with larger, linked palmettes on the material. At the left of the fragment is part of the bent knee of a third figure.

Partial relief contour; dilute glaze between the large ovules on the altar top, and for the blood-stains on the altar.

There seems no reason to regard the one in Oriental costume as an Amazon. The sceptre might suggest Priam, and the altar an Iliuper-

sis, but on Greek vase-paintings of the subject his regular costume is the chiton and himation. The obvious identification is Paris, and the scene would be not his death, which took place on the battlefield, but the dispute between him and his brothers before his recognition (Roscher, *Lexicon*, pp. 1582-83; 1605-06; compare Etruscan representations of Paris with one knee on the altar where he took refuge; Brunn, *I Rilievi delle Urne Etrusche*, I, pls. I-XVI). The story was known in fifth century Athens, for it formed the theme of Euripides' *Alexandros*, which appeared in the ninety-first Olympiad (Aelian, *Varia Historia*, II, 8). The surviving fragments of the play suggest that one feature of it was the contrast between Paris, the country lad, and his town-bred brothers, and this contrast might explain why the two assailants do not wear Oriental costume. The sceptre remains a problem.

The style, with its wealth of ornament, indicates that our fragment is contemporary with such works as the Talos krater (*A.R.V.*, p. 845, below).

The fragmentary black-glazed pottery from this deposit was extremely similar in character to that from the other two groups discussed above (pp. 211-212, 247-248, pls. 72, 79), and many of the pieces find close parallels in Agora well-fillings of the last quarter of the fifth century. Of the red-figured fragments, Nos. 1 and 2 are probably to be dated in the twenties; Nos. 3 and 4 should belong to the years around 400 B.C. The deposit also contained a fragmentary bell-krater which may provide a more precise lower limit; it is published in *Hesperia*, XVIII, 1949, pp. 104-107, pl. 4, where a date between 400 and 397 B.C. is proposed on historical grounds.

The dating for the construction of the drain, around the turn from the fifth to fourth century or shortly thereafter, is derived mainly from the group of pottery just described and from two others that come from behind the walls of the drain and that have been described above, pp. 211-212, 247-248. The latest sherd from the first group is to be dated between 400 and 397 B.C.; those from the other two around 410 B.C. The part of the older channel which lay outside the line of the new drain at the south may well have filled immediately after the new construction had been completed, thus containing sherds slightly later than those from the fillings behind the walls of the new drain, fillings of sand and gravel presumably dug out from the bottom of the existing

channel when the new drain walls were laid. The dating suggested was confirmed in a number of places all along the line of the drain, by sherds from the levels cut through by the drain wall at the bridge in Piraeus Street (above, pp. 152-153) and by the pottery from the triangular area in front of House B (above, p. 198). The remodeling of Houses C and D was probably done at the same time; House K seems to have been converted from a house to a workshop slightly later, as suggested by the pottery from the filling of its well (above pp. 242-243).

We must assume that the building of the drain walls was a single operation, since a channel of the sort formed by them would have been of little use were it not continuous. The assumption is confirmed, indeed, by the evidence of the sherds found behind the various sections of the channel walls; and despite variations and differences of construction between various stretches of the channel walls the project must have been one, carried out at one time. This again is confirmed by the existence in the west wall of the drain of two sections, in front of House A and in front of House F, of "checkerboard" masonry (Pls. 66e, 81a; Fig. 9) which are probably from the hand of the same mason. The building of the drain involved the remodeling of some of the houses which lay beside it, and historically the date given by the archaeological evidence for its construction fits very well: in a very few years after the end of the Peloponnesian War a measure of security and prosperity had returned to Athens. Her citizens were again in a position to restore their properties, which no doubt had suffered from neglect during the preceding period of proscriptions, poverty, and insecurity. Finally, perhaps a very practical reason for the building of this channel in the bottom of the valley between Pnyx and Areopagus at the time suggested was the rearrangement of the Assembly Place on the Pynx above, dated to 404-403 B.C.¹²⁶ The turning around of the hollow auditorium in which the citizens assembled before the bema may well have concentrated the rain-water into one line after every storm, whereas the earlier auditorium, facing in the opposite direction, may well have dispersed it, or sent it down in other directions. Though no traces of canalization were found during the examination of the roadway leading northward from the Assembly Place, it stands to reason that the hollowing of the hillside would have concentrated water; every theater had its *ὄχετός*.

The point at which the drain began at the south is unknown; Dörpfeld found no traces of such a channel in his excavations to the south.¹²⁷ In our area, however, the line taken by the drain was dictated by the necessity to respect the houses and buildings already in existence at each side of the roadway as far to the south as House A. The drain (pl. 81b) takes a far from straight course; after squeezing past the east side of

¹²⁶ Cf. *Hesperia*, I, 1932, pp. 128 ff., 133.

¹²⁷ The only important drain found, of terracotta tiles (*Ath. Mitt.*, XVII, 1892, p. 91; Judeich, *Topographie*², p. 179), would seem to have been much later in date than the Great Drain. It may have emptied into the Great Drain, or continued northward under Melite Street.

House A (and slicing off a sliver from it) the channel ran straight as far as the corner of House C, where it bent toward the northeast to take a course parallel to the east front of the house. Farther to the north it was compelled to bend again in the same direction in order to bypass the projecting room of House D. Thereafter it was obliged to make a quick recovery in the other direction in order to get safely by the southwest corner of the Poros Building. From there it was clear sailing for about forty meters beside a single building, but at the northwest corner of the building the drain again bent toward the north, probably to cross Piraeus Street with a bridge at right angles to it, and also to attain the line of the Street of the Marble Workers, which the drain followed northeastward from the bridge to the southwest corner of the Agora proper.^{127a}

The bridge has already been dealt with at some length in the account of Piraeus Street (above, pp. 151-153). The corbelled construction of poros at the crossing of a main street must have been undertaken as a public work; it extended for the full length of the bridge across the width of Piraeus Street. To the south, however, the walls of the drain show no uniformity whatsoever; their construction and the character of their masonry change every few meters. One would assume that if the drain were a public work it would have been a continuous piece of masonry, uniform throughout. Instead, the construction changes at irregular intervals, the changes often coming at exactly the points where the corners of two properties beside the drain meet. At the west we have a stretch of 7.50 m. of "checkerboard" construction in front of House A; at the corner of the house the masonry immediately changes to small rubble work (Pl. 65c; Fig. 9). How far northward the latter extended we do not know, as the wall was plundered to great depth in later times. Where the west drain wall is preserved again and northward as far as the northernmost room of House C, the construction is of limestone, well fitted, but with rough face; the only noteworthy feature that appears in this stretch is the wall corner which apparently represents a division of the frontage of House B between two houses in its later period. At the line of the interior wall dividing Rooms 4-5 of House C the drain wall bends, and the construction changes (Fig. 12) to squared blocks of conglomerate on a poros bedding. In front of House E the drain wall, badly plundered, appears to have been of large irregular conglomerate blocks, interspersed with patches of stacked work, as opposite House A (Fig. 19). Beside House F, "checkerboard" work again; and at the line of the poros wall separating House F from the complex to the north of it the west wall of the drain changes from "checkerboard" work to carefully fitted polygonal blocks of limestone, their faces rough and semi-rusticated (Pl. 81c; Fig. 15).

At the east side the whole northern extent of the drain wall beside the Poros

^{127a} For the history of the Great Drain in its more northern parts cf. *Hesperia*, VI, 1937, pp. 3 f.; Suppl. IV, 1940, pp. 111-121.

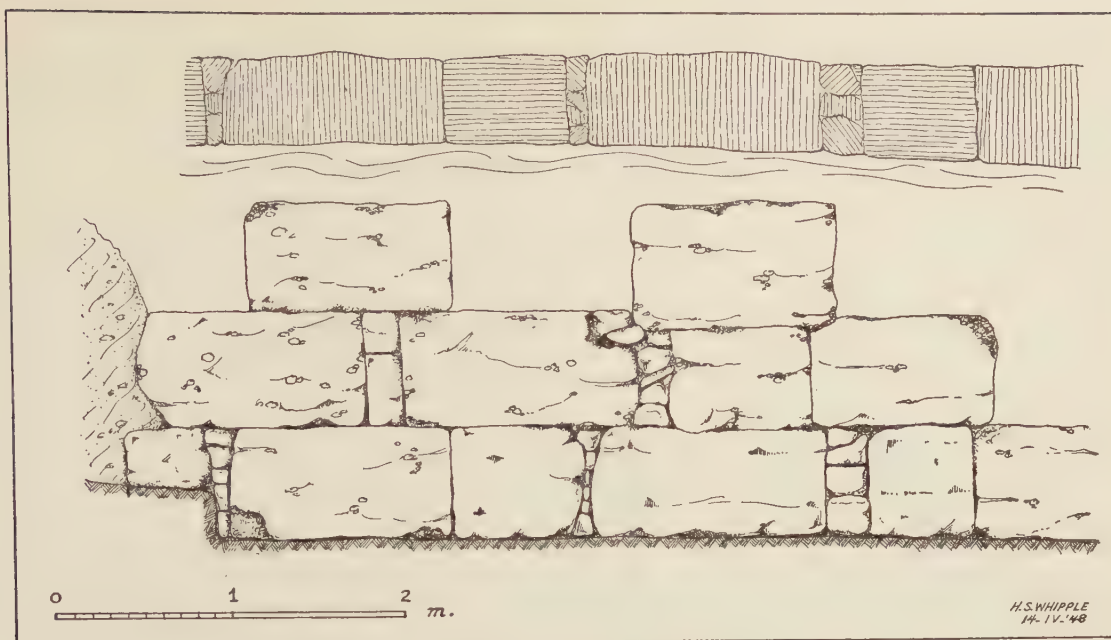


Fig. 19. East Wall of Drain opposite House A: Elevation and Sketch Plan to Show Construction.

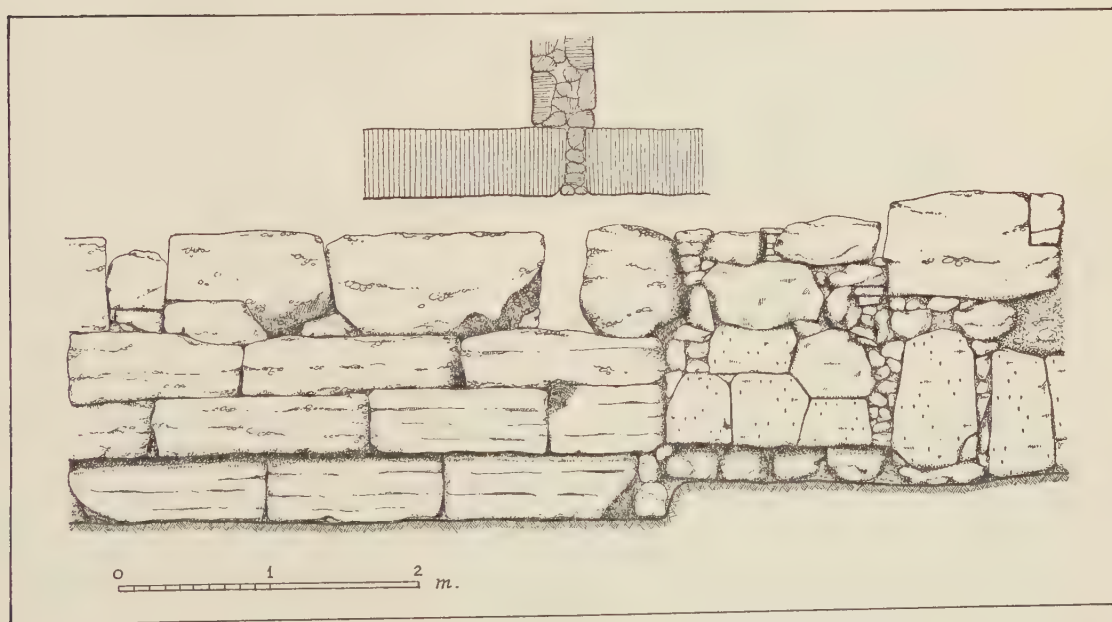


Fig. 20. East Wall of Drain from House J to House K: Elevation Showing Change of Construction, and Plan to Show Return of North Wall of House K.

Building has been rebuilt in late times. The stretch of wall in front of House J to the corner of House K is probably a reconstruction of earlier Roman times; no inlet, for example, was left for the side drain of House K. At the line of the north wall of House K the construction changes, from squared blocks of poros and conglomerate at the north to limestone polygonal masonry at the south (Fig. 20). Farther along, south of the entrance of the Roman drain, a change in construction from polygonal to poros

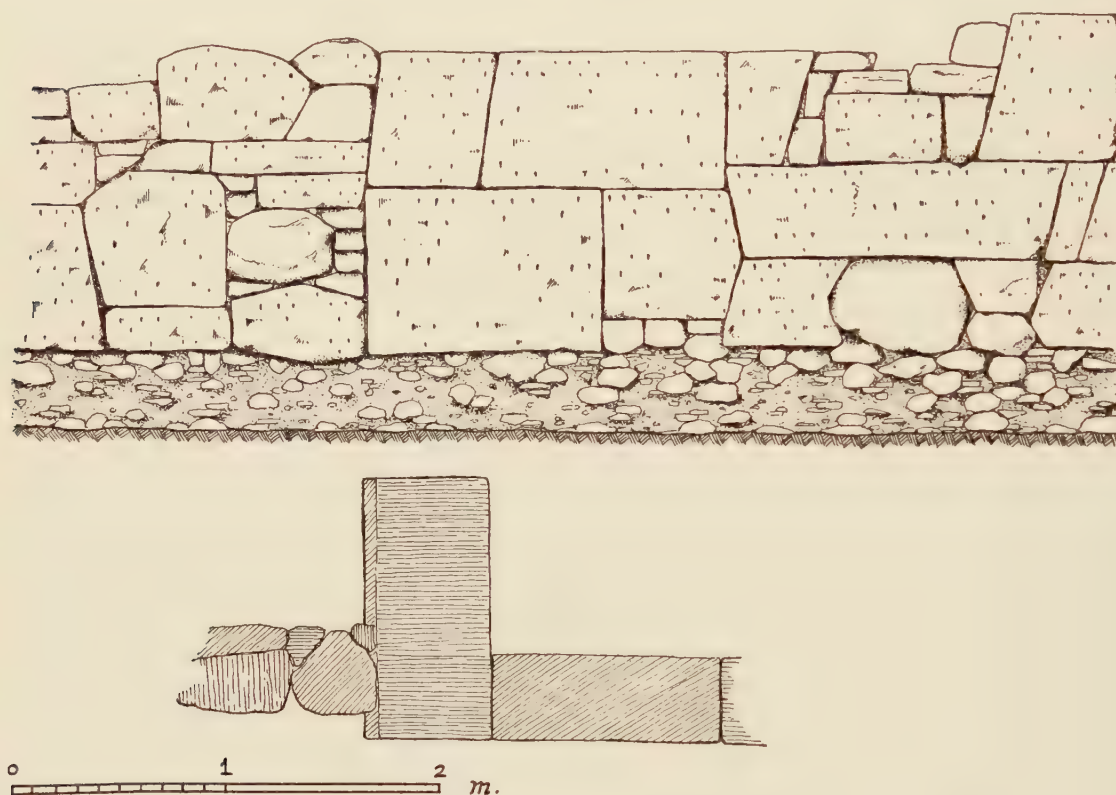


Fig. 21. East Wall of Drain in Front of House L: Elevation and Plan.

blocks filled out with small masonry work (Fig. 21) is the only point at which such a change does not fall in front of a property-line; House L at the east seems to have been continuous. At the line of the side drain entering from the east opposite House B the masonry at the north is of careful limestone work, nicely curved to meet the line of the incoming side drain (Pl. 81d; Fig. 22), while to the south of the opening the construction is a careless jumble of miscellaneous material, perhaps a repair. Finally, opposite House A at the extreme south (Fig. 19), the construction is of large conglomerate blocks interspersed with stacked work.

The major changes in the construction of the drain walls coincide with the property lines of the houses bordering it, especially at the west. We have noticed, too, that the walls of the second periods of Houses C and D in some cases are bonded at their ends with the back of the drain wall. Along the west side, then, the construction

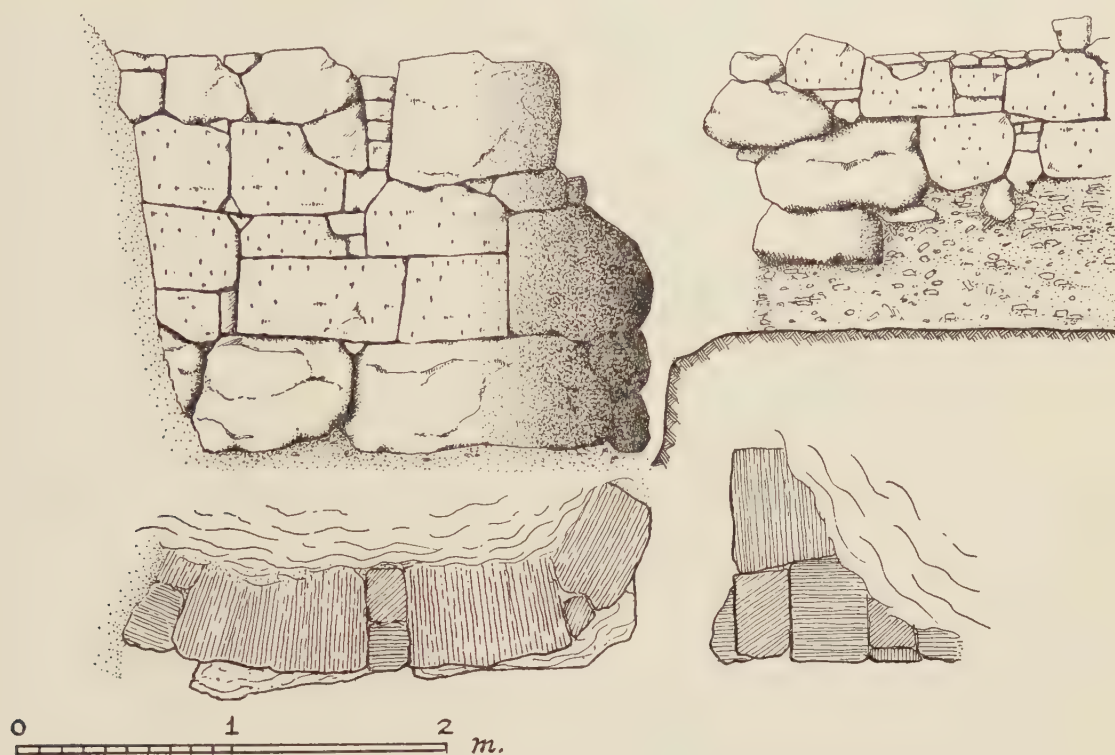


Fig. 22. East Wall of Drain at Entrance of Side Drain: Elevation and Plan.

of drain and remodelled houses is one. There was a certain amount of give and take, too, between drain and houses; House A lost a sliver, House C gained a new eastern margin, House D gained a sliver. The walls of the remodelled A, C and D were built directly on top of the west wall of the drain, as must also have been the walls of F and H at the north. All the indications are that the walls of the drain were built piecemeal, the owner of each property beside its line undertaking the construction of his own section, and adjusting the line to suit himself. Thus the course of the drain, dictated by the positions of the houses already in existence beside it, was in turn the occasion for extensive remodelling of the houses themselves. The property owners at the east were far less affected than those at the west because the ground rises sharply toward the east, and the top of the drain wall lay relatively low; extension of the

houses at the east of the drain would have involved deeper foundations, and considerably more filling in behind them, than at the west.

The new drain was an open channel of somewhat erratic course and varying width. In front of House C its width was as great as 1.40 to 1.50 m.; where it had to squeeze between House D and K, and between House J and the square at the west, it narrowed to 0.60-0.70 m. It was never covered; the wide parts were too wide to be comfortably spanned by slabs laid across from one side to the other, and in any case the house walls at the west were built directly on top of the west drain wall, leaving no place for the ends of cover slabs to rest. No doubt the channel was spanned at some points by wooden bridges: the top of the east wall opposite House A shows cuttings as for beams, perhaps of a bridge. The open channel was of varying depth, in most places about 1.50 m. at the south, somewhat deeper beside the Poros Building. The narrowness of the bottlenecks made passage in the deep channel, walled at both sides and open to the sky, difficult and inconvenient; the old roadway must have gone entirely out of use, its space almost completely filled by the drain. Only two tributaries, aside from the small house drains of the bordering building, entered the drain, both from the east. One we have already noticed; it underlay the alley which came down from Areopagus Street between the archaic cemetery and House N. At some time, probably in the second century B.C., this drain was blocked by the foundation of a Hellenistic house across its line, and its mouth at the Great Drain was walled across (Pl. 81d). Of forty-one coins found in the sandy deposit along its course, ten were of the fourth century, twenty-five were of the third, and one of the second; the rest were illegible. The second tributary was the tile drain which ran across the southern part of House K, already noticed. It entered the Great Drain at about the point where the Roman drain entered later; the reason for these two drains of different epochs converging toward the same point was probably the existence of an inlet left there when the drain was built.

At some time late in the Hellenistic period, perhaps after the siege of Sulla, all the line of the Great Drain to the south of this point was abandoned, and the new so-called Roman drain, running parallel to it some meters away to the east, took over its functions. The main line of the drain was rapidly silted in; the deposit of heavy gravelly brown sand reached from the bottom to the tops of the side walls, in places a depth of 2.50 m. This deposit, except in a few places where a slightly earlier layer overlying bedrock could be distinguished, seemed to be uniform; it was apparently all deposited rapidly over a short space of time. We conjectured that this deposit accumulated after the time of Sulla partly because the drain had suffered damage before it became filled. In places blocks were missing from its top courses, and the gaps where they had been were filled with the same deposit of sand which lay in the drain itself. Mixed sherds of all periods were found in the sand inside the drain; the great bulk of them was of Hellenistic wares of the third century, but there were also many

characteristic pieces of the second, including fragments of lamps of Broneer's Type XVIII.¹²⁸ In the deposit over this stretch of drain abandoned in late Hellenistic times 524 coins were found. Of these 92 were of the fourth century B.C. or earlier, 99 of the turn from the fourth to the third century, 150 of the third century, 23 of the second century. The latest coins were one of Chalkis dated between 196 and 146 B.C. and one of Karthaea in Keos of the second or first century before Christ. The rest were illegible or not closely dateable. The evidence of coins and pottery together are agreeable to a Sullan date for the abandonment of this part of the drain. The statistics of the stamped amphora handles are perhaps also of interest: out of 133 found, 18 were Thasian, 53 Rhodian, 43 Knidian, two South Russian, one Parian, and 16 unassigned.

THE ROMAN DRAIN

We found no apparent reason for the abandonment of the southern stretch of the Great Drain; perhaps excavation farther to the southwest under Apostle Paul Street would reveal one. The abandoned stretch was replaced by another which ran parallel to it about ten meters to the east, skirting the foot of the rise toward the Areopagus below the archaic cemetery and House N. Toward the south at the edge of our area the two drains appeared to be converging, to meet somewhere at the southwest. Toward the north the Roman drain ran as far as the northern limits of the court of House N, then turned northwestward to cut across the borders of houses K-L and rejoin the line of the Great Drain at the point where an inlet probably already existed.

This channel has been called the "Roman drain" or the "post-Sullan drain" because it took over the function of the southern stretch of the Great Drain when it was abandoned, apparently after the siege of Sulla. There were indications, however, that this channel was built and in use before Roman times. For a long stretch from House M to House N its west wall was of large boulders of limestone (Pl. 82d), of which only the lowermost course was preserved. Both material and manner of using it seemed completely alien to ideas of construction of the Roman period, and this stretch seemed earlier, though very late Roman disturbances or silt had gone to bed-rock almost all along its line, and no definite evidence for the date of its construction was found. Only one or two limestone boulders of the original channel were in place at the east side. Below the archaic cemetery, however, the line of the drain passed so close to the mouth of an earlier cistern¹²⁹ that the east wall must in part at least have overlain it. The cistern had been filled at some time in the second century before Christ, probably before the drain wall was carried over its mouth.¹³⁰ The filling in the

¹²⁸ Broneer, *Corinth* IV, ii, *Terracotta Lamps*, p. 61 and pl. VI.

¹²⁹ Cf. the plan *Hesperia*, XX, 1951, p. 70, fig. 1.

¹³⁰ The cistern connected underground by a passage with another shaft to the south, which continued in use until considerably later.

cistern would suggest a second century date for the building of the drain wall. This dating is confirmed indirectly by the filling of the lower, western section of the cross drain coming down from Areopagus Street at the east. We have already noted that this was blocked off at its entrance to the Great Drain by a dam built in the second century, and its course covered by a house in late Hellenistic times. The eastern stretch, however, continued in use well into Roman times, from Areopagus Street to the line of the Roman drain, and there must have been a channel to receive its water at the foot of the hill as early as the second century.

The channel consisted of parallel walls, the space between them varying in width from 1.00 to 1.40 m. The east wall was set against a cutting in the hillside made for it. The channel seems to have been an open one, like the Great Drain, but much shallower; its walls are nowhere preserved to a height of more than 0.60 m., except at the extreme south where the east wall served also as a retaining wall for a terrace lying to the southeast. This drain, set much higher on the hillside than the Great Drain, was not so well preserved and had suffered greater damage and pilfering. At the point where its line bent northwestward to return to the Great Drain there was a drop of almost a meter in the level of its bottom; thereafter it ran in a wide channel cut in the bedrock as far as the Great Drain. This channel was lined at either side by carelessly built walls of reused material; the southern of these was carried right across the channel of the Great Drain to abut against the face of its west wall, effectively blocking it.

Probably in the late second or early third century after Christ a change was made over the entire line of the Roman drain. From the southern limit of our area as far as the southwest corner of House N a smaller built channel was made over the line of the Roman drain, in places reusing its east wall, in places its west wall, and elsewhere following a line of its own slightly to the east in a channel cut for it in the hillside. This channel was about 0.55 m. wide and 0.82 m. deep inside; it was apparently covered with a double-pitched roof made by leaning slabs across it, tangent at their upper edges. The channel was made of brick and tile cemented together with a soft white mortar; it was floored with flat tiles and bricks. From the southwest corner of House N this built channel was continued toward the north in a line of elliptical drain tiles, no doubt with an opening to let in the drainage from the east under the alley between House N and the cemetery (by this time built over by House U). Before the channel was built a wedge-shaped mass of rubble and cement had been laid along the east side of the Roman drain, no doubt to protect the foundation of the west wall of House N from the flowing water (section, Fig. 23); now the replacement of the open channel by a tiled drain gave added assurance that the foundations of House N would not be undermined. The new channel, however, did not follow the old drain throughout its course; at a point to the west of the middle of the court of House N a breach was made in the west wall of the drain and the tiled channel was turned to

pass through it toward the west, then toward the northwest, to rejoin the Great Drain at the same point where the Roman drain had joined it. The purpose of this cut-off was to avoid the deep drop in level in the floor of the older Roman drain at its bend, and to bring the water into the Great Drain at a higher level. This was done at the time of the first construction of the Roman bath above the ruins of House D as part of a general rearrangement. The new channel bringing drainage from the south became a built channel again, instead of a line of elliptical tiles, for some distance to the south of its entry into the Great Drain, where it passed over the terrazzo floor of

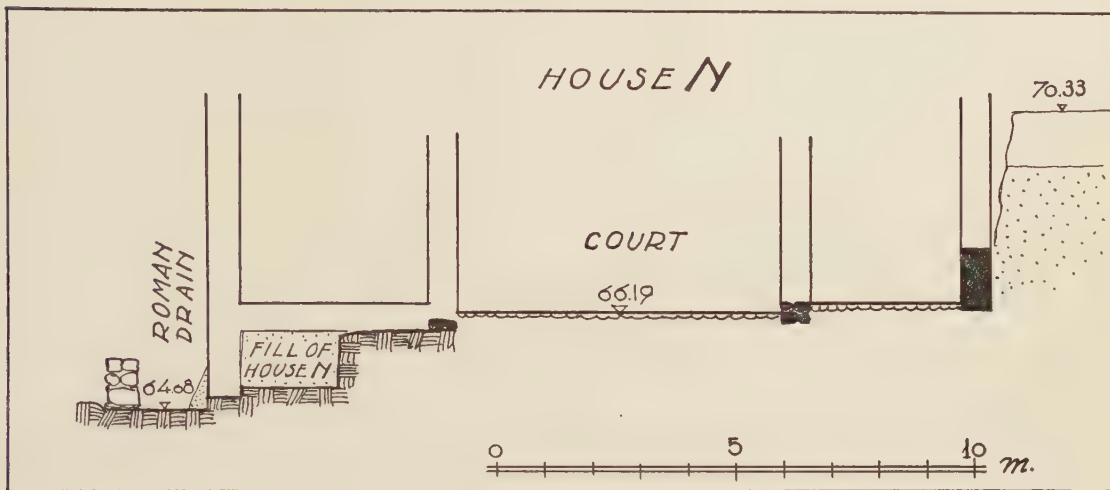


Fig. 23. East-West Section through Roman Drain and West Foundation of House N, Looking North.

House L. A new channel was built to continue it inside the Great Drain and under the east side of the Roman bath. This consisted of a line of half-elliptical lower drain tiles, firmly cemented against the east wall of the Great Drain, and secured also against its west wall but with some rubble filling between, since the width of the tile channel was not as great as that of the drain, especially at the north, where the jog in the face of the House D and drain wall had to be filled in with a solid mass of concrete and rubble, to reduce the width to that of the tile channel. One problem which had to be met was how to carry the new channel, which lay at a high level, over the channel of the Roman drain, which was much deeper, at its entrance into the Great Drain. This was solved by throwing stones into the bottom of the Roman drain, then tipping forward a great poros block from its north wall at the junction with the Great Drain, so that it fell into the channel to rest on the stones thrown in as a bedding for it. The poros block now served as a bedding or a bridge on which to carry the new channel across the gap; since one corner lay a little too high, it was neatly bevelled off to a

flat surface at the level desired (Pl. 82a, b) and the channel carried over it. For a short distance at this bridge and to the north the built channel continued, roofed with slabs tangent at their apices, until the tile channel began. The tile channel itself was roofed by flat slabs laid across below the level of the floor of the Roman bath, but considerably above the tiles themselves.

The date of all these changes may be estimated from evidence from several different places. In the south at one point in its rather wayward course the channel left the line of the Roman drain and passed to the east directly over the mouth of an earlier cistern, which was filled and abandoned at the time (plan, above, p. 70, fig. 1). This cistern connected underground through a tunnel with the one which had been filled at the time of the building of the Roman drain; its filling was Roman, of the first and second centuries after Christ. To the south of this cistern the floor of the channel was laid directly on the sand deposit of the Roman drain, and of 378 coins from this deposit under the floor the latest was one of Rhodes, dated between 166 and 88 B.C. These coins seemed to be very early; perhaps some of the upper and later part of the deposit had been levelled down before the channel was built. At the north, between the take-off of the later channel and its entrance into the Great Drain, the Roman drain lay abandoned. Of 91 coins found in the sand filling of this stretch, which was full to the brim of water-deposited sand, the latest was one of Rome, dated about 49 B.C. Finally, the sand filling of the Great Drain itself below the later tile channel built within it produced 302 coins, of which the latest were of the time of Caligula and Claudius (A.D. 37-54). The coins from all these sealed deposits were remarkably early; the pottery ran later, with plentiful sigillata and other fragments of the first century after Christ, and occasional pieces of the second. We have already noticed that the southern stretch of the Great Drain, which was apparently abandoned at the time of Sulla, produced coins in great numbers, of which the overwhelming majority was of much earlier times. In general it seems that coins found in drain deposits are much earlier than the time of the accumulation of the deposits themselves. A striking example of this was afforded at the bridge, where the latest coin found was one of Arcadius (A.D. 395-408). We know that the latest period of prosperity in Athens lasted until the middle of the fifth century or later; the coin of Arcadius, without the time-lag we have noted in the accumulation of drain deposits, would suggest that the south branch of the Great Drain had filled up at the beginning of the fifth century, fifty years or more before Athens' final collapse, and actually in the middle of her last period of prosperity. Coins and other finds from the deposits under the water channel indicate a date for its construction at some time after the middle of the second century, but before the Herulian destruction of A.D. 267.

To the north of the Roman bath the drain was destroyed to great depth in Byzantine times. Over this stretch the same channel had served in Greek and early Roman times northward as far as the bridge. Beside the Poros Building the entire

east wall had been rebuilt in Roman times; in the channel itself lay a single line of elliptical tile drain, no doubt the continuation of the later water channel under the Roman Bath and to the south of it. The packing beside this tile drain in many places was of complete coarse amphoras, pre-Herulian and to be dated in the late second or early third centuries after Christ. In post-Herulian times the drain had been roofed in places, and houses lying to the east over the Poros Building had been extended westward to the line of the Street of the Marble Workers. In the stretch of the west drain wall beside House F appear the cuttings made as sockets for beam ends at this time, to carry the floors of the houses across (Pl. 81a). The single line of drain tiles ran as far as the south edge of the Piraeus Street bridge; the space under the bridge was not tiled, and when the tiles resumed at its north end the line of tile drains was double, no doubt to take care of the flow from the four additional side channels entering the drain under the bridge.

REMAINS OF HELLENISTIC TIMES

The area was remarkably free of houses of Hellenistic times. We have noted a house of about the second century B.C. between the Great Drain and the Roman drain to the south of the eastern Roman bath. All that remains of it are the cuttings made in bedrock as beddings for its walls. This was considerably more than remained of several other Hellenistic houses which must have existed to make use of the wells and cisterns which were apparently in use during that period, and which contained pottery of the third and second centuries. Perhaps the ground-level of Hellenistic times was higher than that of Roman. The filling under the East Bath, for example, showed a few scanty foundations of a post-Sullan house (a stone catapult ball built into one of them served to date it with probability as post-Sullan) which immediately overlay a red filling of dissolved mud brick, probably belonging to House D. We have noticed that there was a general abandonment or transformation of the bottom of the valley in the latter part of the fourth century B.C., when Houses B, C, D and probably F were abandoned, G was turned from a marble cutters' workshop perhaps into a coroplast's shop, and the Poros Building was abandoned to the stone cutters. Perhaps the area lay desolate for some time in the Hellenistic period. The presence of wells in House D and beside the east wall of the western Roman bath indicates habitation, but no traces of houses remain. Only at the far south, where there was a great depth of filling above to protect them, were there any traces of the activities of Hellenistic times. Here the slope to the southwest of the archaic cemetery had been terraced. A wall of the second century coming from the south abutted against the face of the old cemetery wall at its curve, then continued to the north. To the west of this lay two more retaining walls of Hellenistic times, at successively lower levels. Behind the uppermost of these walls and to the south of the cemetery there were traces of a

workshop of the second century: two lekanes were found in place, where they had been set below floor-level. Around their rims a floor of cement had been made, sloped to conduct liquid into the basins and ridged to keep separate the areas draining into each (Pl. 83a). There had been at least two more lekanes of the same sort near by; the cement floor between the two still in place in part covered the remains of a pyre of the late fourth or early third century. These basins were enigmatic, and nothing was found to throw light on the purposes for which they had been used. Not far away toward the north and set through the level in which lay the lekanes we found a complete pot lying on its side in the earth at the corner of two walls. Inside it was the complete skeleton of a small dog, together with an unguentarium (Pl. 83c, d, e). The dog had obviously been buried in the pot; perhaps it was the grave of a household pet. The coarsely decorated stamnos which had contained the body of the dog, and the late spindly fusiform unguentarium found with it, date probably from the end of the second or the beginning of the first century before Christ.¹⁸¹

1. *Stamnos: Painted Coarse Ware*. Pl. 83d.

Inv. P 16658. H. 0.36 m. Diam. 0.367 m.

Complete, except for chips. Ring foot and broad deep ovoid body; flat rim slightly projecting; grooved horizontal band handles set just above the level of greatest diameter. From below shoulder to rim, three glaze bands, wavy bands between them. Chevrons under handles. Coarse brownish clay with white grits, dull streaky black glaze. Part of the rim was broken off in antiquity and repaired with lead clamps.

Compare a late second century stamnos with

similar decoration. *Hesperia*, III, 1934, p. 418, fig. 104, E 134; also p. 465.

2. *Fusiform Unguentarium*. Pl. 83e.

Inv. P 16659. H. 0.14 m. Diam. 0.027 m.

Intact. Tall thin fusiform unguentarium, somewhat crooked. A groove just above the foot. Grey clay with orange surfaces; three white bands.

A similar fusiform unguentarium was found in the same group as the painted coarse ware stamnos cited above in connection with No. 1: *ibid.*, p. 419, fig. 104, E 138; also p. 473. Late second century.

A factory making terracotta figurines has already been mentioned and an attempt made to locate it in House L. This workshop continued in operation throughout the Hellenistic period, the majority of the fragments of moulds and of the figurines themselves which were found being of the third and second centuries. It seems to have gone out of operation by Augustan times, if not at the time of Sulla; the great mass of figurines and mould fragments was found in a filling thrown behind the west wall of House N (section, Fig. 23) which was probably built at some time in the first century after Christ.

¹⁸¹ At Motya in Sicily, a Punic town, a whole cemetery of small animals was found; J. S. Whitaker, *Motya*, London, 1921, p. 131, 257 ff. The animals buried there were thought to have been the victims of sacrifice, or animals in some way sacred. In 1950, immediately to the east of the Stoa of Attalos, the skeleton of a dog was found in a clay-lined pit, accompanied by a miniature squat lekythos of the fourth century B.C. (*Hesperia*, XX, 1951, p. 52, pl. 26a). The two dogs buried in the Agora were probably pets.

Under House O (plan, Fig. 1) were found traces of a bronze-working establishment. The drop-shaped casting pit cut in the bedrock still contained at its bottom the base on which had been bedded the mould for casting,¹⁸² and shapeless slugs of bronze and fragments of terracotta moulds were found not only in the pit itself but also scattered well down the hillside toward the west. The filling in the pit contained numerous fragments of late Megarian bowls decorated with long petals, in some cases jewelled, dating from the second century before Christ;¹⁸³ the pit would seem to have been abandoned thereafter. It was not possible to tell whether the pit had been used more than once.

WORKSHOPS

ROMAN

It has already been noted that the rectangular storage shaft under House M continued as a source for water, probably for some sort of industrial operation, into Roman times. A square (3.80 by 3.90 m.) water basin, heavily built of rubble and cement, overlay its north end, in which water drawn from the shaft could be conveniently stored or used at the surface (Pls. 82d, 83b). We found no hint here as to what was manufactured; but at a similar water tank a few meters away to the north, beside the Roman drain (plan, Fig. 1), we found evidence that marble had been worked. The tank itself was not well preserved, and was considerably smaller than the one over House M, measuring only 3.01 by 2.50 m. Beside it lay a well, obviously the source from which water had been drawn for use in the basin. The construction was similar to that of the tank over House M; walls of rubble and concrete, the floors turned upward at the edges inside, the corners bevelled. The tank had been in large part destroyed in Byzantine times, and the well had been reused to a certain depth. Below the Byzantine fill, which went to a depth of about 11 m., however, the original filling of the well was intact, stratified to a depth of 17.60 m. The upper levels of this filling were of the early third century after Christ, the lower of the early second; the well thus seems to have been in use for about a century. It was intended as a source for a large supply of water, and great pains had been taken in its preparation. The water level (June 22, 1946) was at —4.50 m.; the well was carried to a depth of —17.60 m., lined all the way with drums of specially-made well tiles. At its mouth the inner diameter of the well was 0.78 m.; at bottom, 1.36 m. To take care of this increase in diameter the tile drums had been made to fit, the drums increasing in size as they went downward; but they were not allowed to overlap at the joints, and each drum had been made with a slightly greater diameter at the bottom than at the top, in order to fit the drums above and below. Depth, diameter and care

¹⁸² *Hesperia*, XVII, 1948, pp. 170-171, fig. 7.

¹⁸³ Cf. *Hesperia*, III, 1934, E 74, p. 405, figs. 93a-b; also p. 457.

in the making of the tile lining of the well bespeak the desire for a copious and permanent water supply, presumably for industrial purposes rather than for mere household use. In the filling of the well was found a number of fragments of unfinished spouted basins of marble and other kinds of stone; the presence of these in the well suggests that the workshop in which they were made stood near by and used the water from the well in the tank at its mouth. All of the pieces date from early in the Roman period, probably the second century.

1. *Marble Basin, Unfinished: Pentelic.* Pl. 84a.

Inv. ST 354. H. 0.041 m. Diam. 0.17 m.

Complete; two small holes through the body. Low base and shallow body with three lug handles and a spout; ivy leaf in relief outside below the spout.

Unfinished; the inside roughly worked and still showing tool marks, the lug handles not worked down and the spout unchannelled. Traces of guide lines scratched on the rim, handles and spout. Probably abandoned when accidentally pierced by holes in working.

2. *Marble Basin Fragment, Unfinished: White Marble.* Pl. 84a.

Inv. ST 353. H. 0.031 m. Diam. est. 0.12 m.

Granular white marble. The fragment preserves about a quarter of an unfinished shallow bowl, with the spout and profile complete.

Low base; the outside unfinished, with an ivy leaf in relief below the spout. The inside roughly worked, showing tool marks; the spout unchannelled.

3. *Marble Basin Fragment, Unfinished: Pentelic.* Pl. 84a.

Inv. ST 358. H. 0.044 m. Width 0.112 m.

The full profile preserved, with flat bottom and voluted decoration outside below the spout. The inside roughly hollowed, the rim unpolished, the channelling of the spout not carried across the rim.

4. *Marble Basin Fragment, Unfinished: Pentelic.* Pl. 84a.

Inv. ST 356. Max. dim. 0.07 m. Diam., est. 0.13 m.

Part of the wall and one lug handle preserved; the inside only roughly hollowed.

5. *Stone Basin Fragment, Unfinished.* Pl. 84a.

Inv. ST 355. H. 0.087 m. Width 0.239 m.

Micaceous dark grey stone. The full height preserved, with one lug handle. The outside left rough, the inside roughly finished, but the floor worn smooth by rubbing.

The basin of inferior stone, left unfinished outside, may have been used in the workshop itself.

Other fragments of unfinished marble implements of the Roman period were found in the filling over the Poros Building; their presence there implies that the marble workers continued to operate in the vicinity probably up to the time of the Herulian incursion. Two finishing-stones of emery (Pl. 84c) were found together with many chips of Hymettian marble at the early Roman level about one meter above the original floor in the southwest corner of the Poros Building Annex. They are identical in size and shape with emery stones used by modern Athenian stone-cutters for polishing marble. A great tank or basin similar to the one over House M lay to the north of House O, and yet another at the very south end of the area. We found

no wells to go with these, though they must have had some source of water; nor was there any evidence as to their use. Both dated from about the same time as the others, and we may assume that large rectangular water basins or tanks were characteristic of the second century after Christ and were used for industrial purposes.

GREEK

It is perhaps worth while to pause briefly to recapitulate the evidence for workshops in this industrial section of Athens at various periods.¹⁸⁴ We have seen that our area was almost certainly a part of Melite or of Kollytos, both of which were demes containing workshops of various kinds. Wilamowitz¹⁸⁵ has listed from the building inscriptions the metics living in various parts of Athens, by deme and trade. The demes leading all the others in artisan metics between 420 and 320 B.C. were Melite, Skambonidai and Kollytos. The crafts plied in the first and last of these demes were: goldsmith, worker in encaustic, cabinet maker, mason, sculptor, carver of ornamental stone work, gilder, lead merchant, brick-layer and odd-jobber. We found plentiful evidence for marble working in the fifth and fourth centuries, in Houses G, H, K, and over the Poros Building.

The discards and recognizable fragments from the marble chip fills of the fifth and fourth centuries were very few. Three objects listed below, however, are of interest: a small marble hand, unfinished, from the marble-chip dump over House K; a block of marble, perhaps the arm of a herm, from the filling beside the gutter in the Street of the Marble Workers in front of House G; and another much smaller herm-arm from the marble works over the Poros Building.

1. *Marble Hand, Unfinished: Pentelic.* Pl. 84b.

Inv. S 1350. P. L. 0.053 m.

Small right hand, broken off at the wrist, and with the fingers broken off diagonally. A socket for a pin in the wrist. The inner face roughly worked, and probably unfinished; rasp marks on the outer face.

2. *Marble Arm of Herm (?)*. Pl. 84b.

Inv. S 1426. P. L. 0.069 m. W. 0.054 m. Th. 0.024 m.

White marble, probably Pentelic. Rectangu-

lar block of marble, plain-finished; one end flanged for inseting into a socket, where it was fastened with a pin. A deep round hole in the upper (or lower) face.

3. *Marble Arm of Herm (?)*. Pl. 84b.

Inv. S 1427. P. L. 0.018 m. W. 0.016 m. Th. 0.0095 m.

White marble, probably Pentelic. Small block of marble, nearly square; a flange at one end for inseting into a socket.

¹⁸⁴ A boundary stone found in the old Greek excavations in the Agora may well have come originally from this area, though we know that there were workshops on the Kolonos to the south of the Hephaisteion. It was published by Oikonomos, *Ἀρχ. Ἐφ.*, 1911, p. 242, and reads:

ὄρος
ἐργαστηρ[ί
ο ἱπ<ο>κειμέ
νο ΠΗΗΠ

¹⁸⁵ *Hermes*, XXII, pp. 117 ff.

The marble-cutters and sculptors (Pl. 84c) probably had their own workshops here, and worked under contract on the Acropolis at such state enterprises as the adornment of the Erechtheion. Contemporary with them were the smiths or bronze-workers who occupied House D in the fourth century; their work is not mentioned in Wilamowitz's list, but his sources, building inscriptions, deal only with work done on public buildings. Bronze and marble were worked in our area into late Hellenistic times (bronze-casting pit) and the Roman period (unfinished marble basins).

Our workers in terracotta again are not included in Wilamowitz's list; their work had no relation to that done on the public buildings, though they seem to have worked here from the fourth century onward. Finally, we found plentiful evidence in House F and to the north of the working of bone, mostly the discarded knobby ends of the straight bones, which had been carefully sawn off. An occasional straight fragment of bone showed knife marks; it had evidently been roughly cut down to size suitable for a pin, needle, stilus or some such implement, and never finished.

The cabinet makers and gilders and the workers in encaustic, gold and lead had left no traces by which they could be identified; nor could their activities be sensibly fitted into any of the workshops (House F, House K in its later period) in our area of which the uses remain enigmatic. We can say, however, that Wilamowitz's characterization of the three demes as industrial sections of Athens has been fully justified; his evidence over a limited period was based only on building inscriptions and work done by metics. Our excavations have revealed traces of other minor industries which were practiced in this part of Athens over a long time; they overlap Wilamowitz's list only in the crafts where it might be expected that unmistakable traces would remain, those of the stone workers and masons, who were also employed in public works on the Acropolis and elsewhere, though they apparently had their ateliers or headquarters in our area.

HOUSES OF THE ROMAN PERIOD

As has already been noted, it is not intended to discuss here the group of well-preserved houses of Roman times in the northwest part of the area, to the west and north of the Street of the Marble Workers; these houses need further excavation before they can be finally studied, and it is hoped that our area may be extended enough toward the west to fix their western limits. These houses lay between Piraeus Street and the Street of the Marble Workers; some of the Roman houses in the rest of the area were also laid out with reference to the various streets, as N, O and U beside Areopagus Street. Houses P and Q occupied the site of the Poros Building and R, farther to the north over the same building, no doubt bordered on Piraeus Street. Houses S and T were perhaps approached through the alley which ran southward from the Street of the Marble Workers, though House S effectively blocked its south end (plan, Fig. 1).

Most of these houses were very fragmentary, but their presence in our area serves as a link between the rather elaborate Roman houses on the slopes and spurs of the Hill of the Nymphs at the west and those on the slope of the Areopagus at the east. Of House N the plan was nearly complete and we may take it as perhaps typical. The other more fragmentary houses may be described more briefly, and only such features as mosaic floors noted.

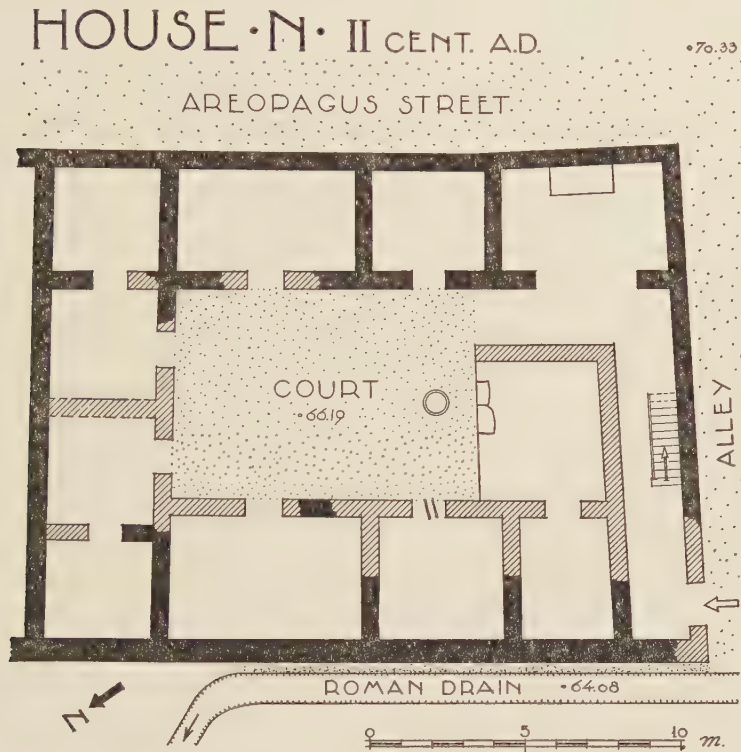


Fig. 24. House N: Restored Plan.

HOUSE N

Plan, Figs. 1, 24; section Fig. 23.

House N lay beside Areopagus Street in a great cutting made in the hillside which accommodated both House N and House O. The northern part of this cutting was considerably earlier than Houses N-O; fragments remained of walls as early as the fifth or fourth centuries B.C. which, together with wells of the same period, suggested that earlier houses had stood here beside Areopagus Street. The southern part of the cutting, however, showed no traces of earlier houses, and it was perhaps specially made as an extension of the older cutting for House N. In many places in the area

of House N disturbances of Byzantine times went to bedrock, and often its walls were represented only by their trenches.

The house extended for 20.30 m. from north to south beside Areopagus Street; beside it at the south passed the alley with its drain, dividing House N from House U which overlay the archaic cemetery. At the west lay the Roman drain. The width of House N from east to west, 16.50 m., was greater than that of the cutting, and the west wall of the house served both as foundation and retaining wall. Earlier cuttings made from the west had scarped the hillside; the builders of House N, carrying their west wall outside these scarps, were obliged to fill in behind it with earth to bring the level of the west rooms of the house up to that of the court and the other rooms. The west wall was built of large squared blocks of conglomerate, perhaps reused; many of them were stolen in very late Roman times. The west wall of the house was also reused as the east wall of the Roman drain. To protect its foundation from being undermined by the stream of water in the drain a wedge-shaped shield of rubble and cement was laid against its outer face (section, Fig. 23). Rather surprisingly, over long stretches the plunderers of the foundation stones of the wall had removed the blocks without damaging the rubble shield in front of it. The filling thrown in behind the west wall served very well to date the house in the first century after Christ; besides the debris from the terracotta factory this filling produced occasional fragments of sigillata and other Augustan wares, and lamps of the first century after Christ. The foundations for the walls dividing the west rooms of the house were laid in this fill, usually merely masses of small fist-size stones. They evidently carried only light interior walls; in every case they fell opposite the walls separating the rooms at the east side of the house, so that the plan was symmetrical. At the north House N shared a common wall with House O.

In plan the house consisted of a central courtyard with rooms at all sides. To the north lay a long room, the width of the court, later divided into two, with a smaller room opening from it at either end at the corners of the house. To east and west of the court lay a larger northern room and a smaller southern. At the south most of the width of the court was occupied by a room or large alcove open to the court. A corridor beside this at the east gave access to the room at the southeast corner of the house. The south side was occupied by a long narrow corridor which perhaps contained a door leading to the alley at the south, and a staircase leading to the upper floor. The house was sunk in a cutting in the hillside, with the floor of the court as much as 2.00 m. lower in level than the surface of Areopagus Street at the east. The house then must have been two storied, the upper storey fronting on Areopagus Street; court and ground floor were accessible from Areopagus Street through the second floor and probably by an inside stair for which there is room at the south side of the house, perhaps also through a door at the south opening to the alley. Only one stone of the south wall of the house is still in place, and therefore no traces of the door

remain, but the southern limit of the house is fixed by the bedrock cutting against which its south wall was set.

The house was built largely of reused material; its foundations contain pieces of limestone, poros and conglomerate packed together indiscriminately. Only to east and west, where the walls were retaining walls as well as foundations, were large squared blocks of conglomerate used. The east wall, retaining Areopagus Street, suffered heavily in later times, and long stretches were replaced by rubble and concrete when the house was rebuilt in post-Herulian times. Probably, however, the original house was constructed of sun-dried bricks on socles of stone. The court was paved with a floor of white marble chips, laid in mortar over a bedding of small stones mortared together; its surface, considerably worn, indicates that it had a long period of use. The largest of the rooms at the east was similarly paved with a marble chip floor at a slightly higher level than that of the court. The alcove at the south was paved with tile chips laid on edge, separated from the court by a raised sill of which two blocks are still in place, very worn on their upper faces. The northeast room of the house had a similar tile-chip floor. In all the other rooms the original floors had been cut through or destroyed in late Roman and Byzantine times.

The well of the house lay in the court near its south side. An octagonal opening in the floor over the well suggested that it had been covered by a large well-curb fitted to the floor, or around which the floor had been laid; the block itself was missing. The well went to a depth of —10.60 m., neatly lined to bottom by drums of tile; its filling was stratified. The first three meters were occupied by a very late dump, perhaps of the fourth or fifth century after Christ, which no doubt got in when the well-curb was stolen from over its mouth. Below that and to a depth of about —7.50 m. lay another dump, apparently of debris from the destruction of the house by the Herulians in A.D. 267; it included bits of broken tiles and marble revetment, and chunks of marble-chip flooring from the house itself. The pottery was of the third century after Christ; a marble head found in this filling had doubtless served to decorate one of the rooms, perhaps the court or its alcove, before the Herulian destruction.¹⁸⁶ The head, however, was not completely finished; the upper part of the chest was not smoothed to fit into a socket, and its surface was left roughly worked. The marble throughout had not received its final finishing and polishing, all the flesh surfaces clearly showing the rough marks of the rasp. The head should probably be dated in the latter part of the second century; perhaps it was made in one of the near by workshops and set up unfinished as a sort of protome in House N.

Below the destruction debris of Herulian times began the deposit of the well itself, about three meters of nearly solid pottery. Unfortunately the pottery was almost all coarse, and almost all of the same sort: basket-handled water-jars, one-

¹⁸⁶ *Hesperia*, XVII, 1948, p. 179, pl. LVII.

handled jugs of micaceous ware, coarse oinochoai and pitchers of kitchen ware. The only decorated pot was a mould-made jug bearing in relief on its sides two of the labors of Herakles,¹³⁷ found well down in the pottery deposit. The few fragments of lamps served to date the various stages of the accumulation; fragments of Type XXVII lamps of the early third century lay in its upper layers, and fragments of Type XX of the late first and early second lay in its lower layers. The accumulation seems to have continued from the end of the first to the middle of the third century after Christ and to reflect the history of the house, which as we have seen from the packing behind its west wall, was built at some time in the first century after Christ.

HOUSE O

Plan, Fig. 1.

House O, immediately to the north of N, seems to have been very similar in plan and about contemporary in date. The two houses shared a common wall which divided the south end of O from the north end of N. All of the northwestern corner of House O has disappeared, plundered in Byzantine times or washed down the slope by the freshets descending from the Areopagus. The house, however, was smaller than House N, measuring only 16.50 m. from north to south. Its court lay at the north side, rather than in the middle of the house, and there was no suite of rooms to the north of the court. The largest room of the house lay to the south of the court, over an old bronze-casting pit of Hellenistic times (p. 269 above). Along the east side and bordering Areopagus Street lay three rooms, somewhat deeper than those of House N; to the west lay three more, which were not placed symmetrically to those of the east side. The construction of the walls, as far as they are preserved, was similar to that of N; doubtless House O was also of sun-dried brick and stood to a height of two storeys, the upper storey opening to Areopagus Street at the east. The west wall of the house fell to the north of the Roman drain and the cuttings to the east of it; the wall as preserved is partly of good construction of Greek times, probably of the fifth or fourth century, and partly a rebuilding and repair made when House O was built. At the east the three rooms beside the court overlay an earlier wall belonging to a house of Greek times; curiously enough the line of this wall was taken in House N to the south for the wall dividing the east rooms from the court, while in House O the wall itself was buried and the east rooms were extended toward the west. No floors were preserved in any of these rooms, or in the court; such fill as was undisturbed, however, contained much the same sherds as did the filling of House N, suggesting a date for House O in the latter part of the first century after Christ. There was no well within the house; but a well outside to the west was contemporary and probably belonged to the house. At the time of construction a terrace

¹³⁷ *Hesperia*, XVII, 1948, p. 183, pl. LXIV.

wall was carried westward as far as the Great Drain, over the line of the north wall of House K, and the level of all the area to the south of the terrace wall and to the west of House O was raised. The well at the northeast corner of this terrace had a small enclosure of its own, and was covered by a large well-curb of poros. The filling of the well-terrace and around its curb dated from the second century after Christ; the well was contemporary with House O or slightly later and had no doubt belonged to it. Unfortunately the well had been found and reused in much later times; the pottery in its filling to bottom was of the fifth century after Christ.

HOUSES P-Q-R

These three houses overlay the Poros Building. They have been lettered from the south northward, and little need be said about them here as they have already been noted by Miss Crosby (p. 183 above).

House P lay partly over the Poros Building, partly in an eastward cutting-back of the hillside. The Byzantine disturbance went so deep here that only the east end of the house, cut into the rock, was well preserved. Two rooms lay in the cutting at the east, and the foundations of two more still remained at the west; for the rest the house has disappeared or remains covered by later foundations. The corner room at the southeast retains some of its painted stucco decoration: large rectangular panels separated by floral ornament in red and green, above a dado. The panels, presumably meant to contain figures, were never filled. The house was pre-Herulian, probably of the late second or early third century.

House Q, to the north and west of P, had a large open court paved with a marble chip floor, and a well near the north side. A division across the floor near the south end suggests an alcove open to the court, as in House N. The limits of the various rooms around the court cannot be closely fixed: the court with its pavement appears to date from the years between Sulla and Augustus, while the rooms around represent a remodelling of the house in the first century after Christ. The well could unfortunately not be dug, as it was used during the years of the occupation as a dump for whatever explosives were found in the streets near by and in the excavations themselves, and its digging would in consequence have involved considerable danger.

House R, to the north of Q, had a similar paved court surrounded by rooms, and apparently was also of two periods. The well in the court produced at its bottom a filling of the first century after Christ, probably to be associated with the first period of the building. The house opened to Piraeus Street, which passed by immediately to the north.

HOUSE S

Plan, Fig. 1.

House S lay to the west of T, the house of Roman times which overlay Houses B-C. It was probably approached from the Street of the Marble Workers through an alley which passed over the side drain just to the east of the unfinished Mycenaean Tomb. The west wall of House S, considerably older and reused by the Roman house, had formerly been a retaining wall along the east side of the alley, which was cut off at the south by the building of House S. At the east a common wall apparently divided House S from House T. All over the area of House S Byzantine disturbance had gone very deep, and little remained by which to date its construction, though it was probably built in the third century before the Herulian sack. Three rooms were preserved, but the house apparently extended southward and westward under the undug area, and little could be made of its plan. One of the rooms was paved with a mosaic floor (Pl. 85a) 4.30 m. long by 2.90 m. wide, in which the design of the central panel was made with its bottom toward the west, suggesting that the entrance to the room, perhaps from the court of the house, lay in that direction. The mosaic consisted of a square central panel bordered by wave pattern, with a rosette in the middle. To the left of the central panel an urn, to the right, two doves; the whole surrounded by an oblong border. The mosaic was made of chips of white marble and dark blue stone, and of fragments of red and yellow tile: blue for the wide outer border, the urn and doves, the wave pattern and the background of the central rosette; red for the border of the inner panel around the wave pattern, and for the center of the rosette; and yellow on the breasts of the doves. The house was evidently destroyed in the Herulian sack.

HOUSE T

Plans, Figs. 1 and 3

The house which overlay Houses B and C to the east of House S dated from about the same time as S: early third century after Christ. Its walls had been almost completely plundered in late Roman and Byzantine times; the floors of three rooms remained. In the southernmost room only the floor bedding of broken pottery was left; in the other two rooms most of the mosaic floors of white marble chips decorated with simple geometrical designs in dark blue stone (Pl. 85b) remained. A deep Byzantine pit had taken a great bite-shaped arc from the west side of these rooms. In digging outside the house we found fragments of Type XXVII lamps in the footing trenches and the fill thrown in to raise the level at the south, over House B; and these suggested a dating early in the third century. The area at the south contained two great piers of which the purpose was not ascertained; to the west of the two northern rooms lay two or more, separated by a wall of which a small stretch remained, overlying the south wall of House C. All along the west and south sides of the house the

outer walls had been protected from water, perhaps the drip from the eaves, by sloping shields or aprons of cement. We dug out the east wall trench of the house, expecting to find big reused blocks; no traces of the walls remained. They had apparently been plundered in post-Herulian times for building material for reuse; it was astonishing that the sloping outer aprons of cement had not been damaged in the process of taking out the stones (Pl. 67b). A similar device was used in the Roman drain to protect the foundation of House N, and there too the protecting apron of cement remained after the stones backing it had been taken out. The absence of the foundation stones, however, was helpful to us in that we were enabled to dig deeper in their trench and to spot some of the remains of the earlier Houses B and C in their pre-drain periods.

HOUSE U

The house which overlay the archaic cemetery seems to have been earlier than Houses S and T; the house well, close beside the cemetery wall at the southwest, produced pottery of the first and second centuries after Christ. The house itself was damaged and fragmentary; it seemed possible to discern a row of rooms or shops at the east, fronting along Areopagus Street. Because of its position beside the street the site continued in use into late Roman times, and there was evidently a post-Herulian rebuilding in which much of the material of the earlier house was reused. No plan could be established.

ROMAN BATHS

The central part of the area was occupied by two bathing establishments of Roman times, which lay one to the east, the other to the west, of the Street of the Marble Workers. Both had been constructed in part of dry stone masonry and reused material, in part of heavy rubble and concrete masonry. Both lay in the path of the heaviest plundering of Byzantine times, and both had been stripped of their walls; only the heavy concrete foundations and floors, too hard to break up easily, remained. The proximity of these two baths, which appear to have been in use at the same time, suggests that one was a men's bath, the other a women's, the more elaborate one at the east presumably the men's. The one has been called simply the East Bath and the other the West Bath. Here we will give only a brief description of each, with some discussion of the chronology; baths of the Roman period in Greece will be the subject of a later general study by John Travlos.

THE EAST BATH

Plans, Fig. 1, 25, 26

The bath overlay the Great Drain, taking the east wall as the foundation for its east side. All the parts of the building which were used for actual bathing, and there-

fore contained water and heating apparatus, were built of rubble and concrete; the rest was of dry stone and had largely disappeared in Byzantine times. The building was entered from the west, apparently through a court on to which gave a service entrance at the north and a main entrance at the south, leading to the apodyterion or dressing-room (A on the plan).¹³⁸ The dressing-room was paved with a floor of bits of marble of various colors laid in cement; only a small portion was still in place at its northwest corner. Court and dressing-room were built with walls of reused conglomerate and breccia blocks on a dry stone bedding; almost all of the blocks had been stolen in Byzantine times.

A door in the north side of the apodyterion gave access to the frigidarium (F on the plan), a room measuring 3.10 by 2.20 m., with a sunken plunge-bath for cold water at either side, rectangular at the east, apsidal at the west. In the eastern basin remained impressions of the paving and revetment of thin marble in the concrete bedding against which they had been laid; fragments of white, green and pink marble from these pavings and revetments were found in the disturbed fillings over the bath. To the north of the frigidarium lay a small anteroom, with a second apsidal plunge bath at its east side; at the west a door gave access to a small service room opening on the court. The well, which was no doubt the source of water for the bath, lay in the northern part of the service room. From the anteroom a door at the north gave access to the tepidarium (T on the plan), with which began the arrangements for heating with hypocausts under the floor and hollow panels behind the walls. The room measured about 2.70 by 2.30 m.; there were probably five rows of columns of full round hypocaust tiles from east to west, and three rows, with a row of half tiles set against the walls at either side, from north to south. The walls were probably faced with mammary tiles (of which we found a number of fragments) behind a marble revetment, so that the hot air could circulate in the hollow panels behind. The room to the north, the caldarium (C on the plan) was mostly broken away in Byzantine times, and its restoration is largely conjectural; part of its east and west foundation, however, was preserved, and the furnaces for the heating of the bath must have lain to the north under the hot room, which perhaps had two plunge baths of its own.

The bath had been made by laying down a hard concrete floor over the whole area, completely covering the heavy foundations which had been previously laid to carry the various walls. This level was constant through the tepidarium and the caldarium (section, Fig. 26); for the frigidarium the level was raised by the laying of two more thick layers of rubble and concrete to bring the floor level of the frigidarium to that of the floor over the hypocausts in the tepidarium to the north. A similar heavy block of concrete brought the northern part of the service room, around

¹³⁸ The south wall of court and apodyterion, and the east wall of the latter, were found by Dörpfeld, and appear on the plans, *Ant. Denk.*, II, pl. 37, and Judeich, *Topographie*², plan 1, as a wall corner.

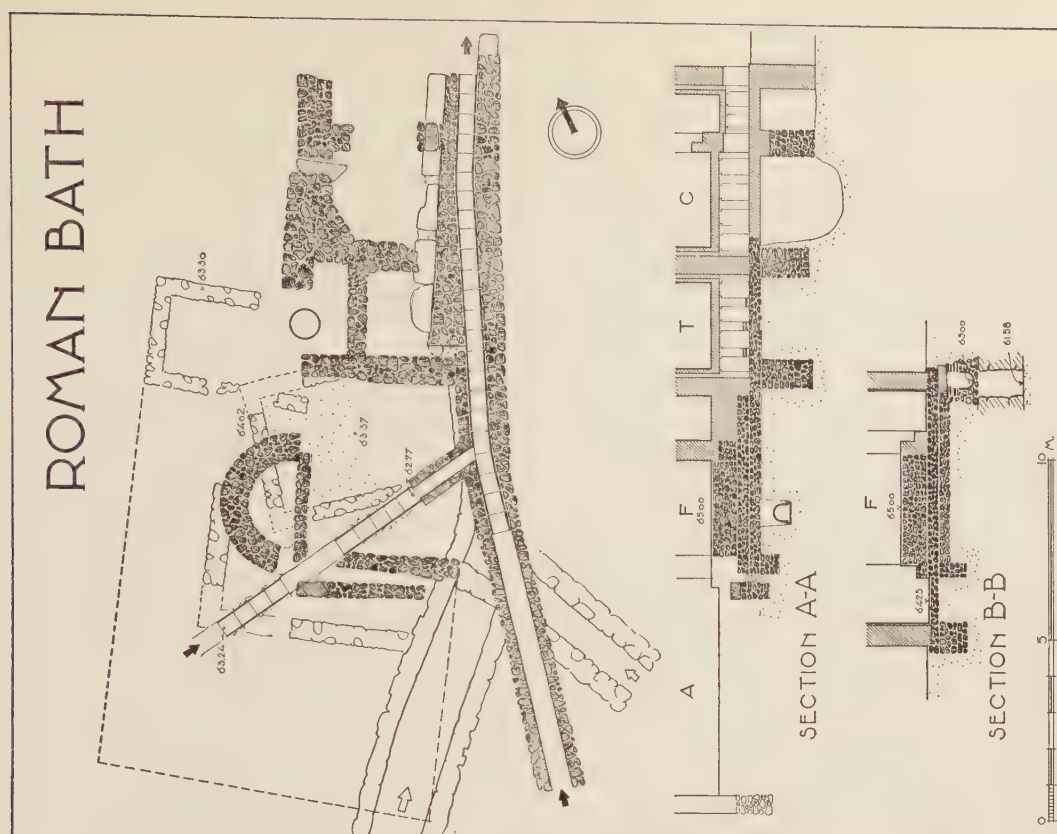


Fig. 26. East Bath: Plan of Foundations, and Sections at A-A and B-B (Fig. 25).

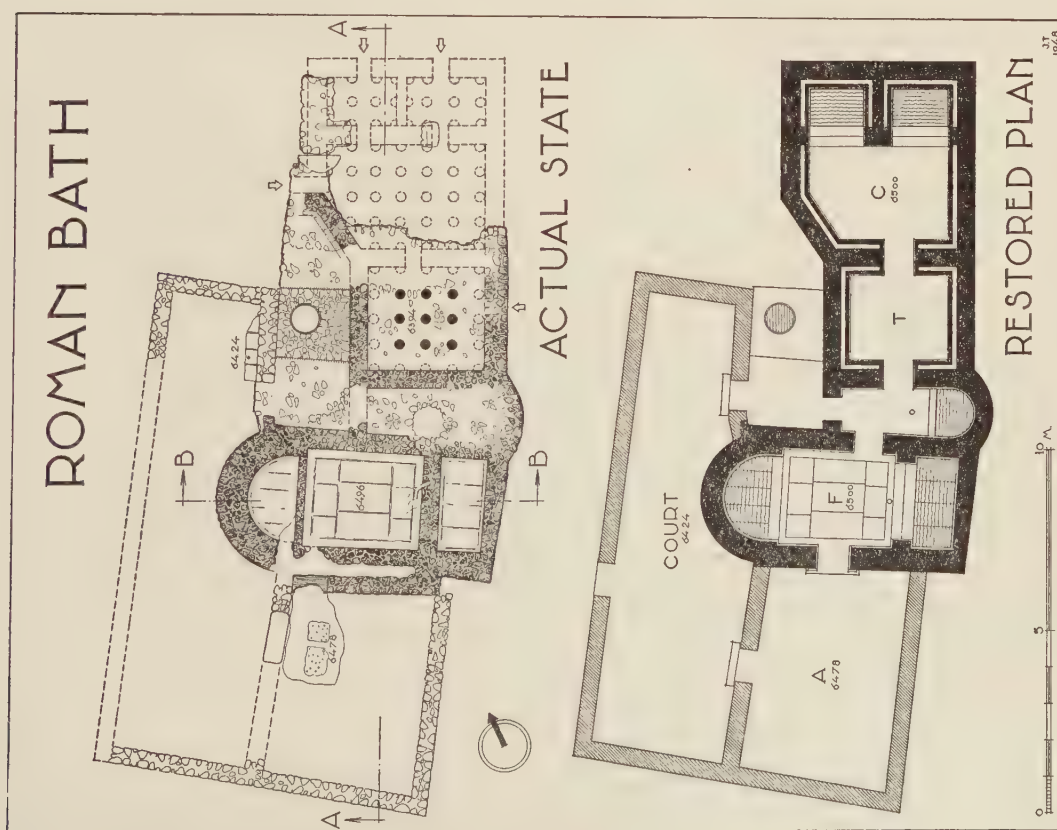


Fig. 25. East Bath: Plans, Actual State and Restored. A—Apodyterion; F—Frigidarium; T—Tepidarium; C—Caldarium.

the well, to the same level. The upper walls of the building had been laid on top of the concrete flooring or levelling block, but they had been completely robbed in Byzantine times and could be traced only by the impression they had left in the surface of the floor. Often enough they had not been laid exactly over, or on exactly the same lines, as the foundation walls underlying the flooring.

Beneath the bath lay the remains of two earlier houses (plan, Fig. 26), one to the west and south of the apse of the frigidarium belonging to Hellenistic times and another, under the frigidarium and its apse, apparently post-Sullan, with a large stone catapult ball built into it. These foundations immediately underlay the bath, and stood on the filling of dissolved mud brick which overlay House D: evidently the whole area was levelled down at the time of the construction of the bath.

Two channels ran beneath the bath, of which one was an earlier drain that came in from the southwest and was cut through and filled by the western wall foundations of the bath. Its east end, however, was reused, and partly rebuilt as a walled channel, to drain the frigidarium into the north-south channel which ran under the whole eastern side of the bath (plan and sections, Fig. 26). This channel as we have seen above was the later replacement of the Roman drain, from the cut-off west of the court of House N to the bath, and under the bath itself. The junction of the three drains—Great Drain, Roman drain and Roman channel—at the southeast corner of the frigidarium can be seen clearly on the plan, Fig. 26, and also the necessity for bridging over the Roman drain to carry the channel across. In the section through the frigidarium, B-B on Fig. 26, appears the channel under the east side of the bath, laid at a high level over the course of the old drain. It will be seen that this channel was an integral part of the construction of the Roman bath, and that it must have been contemporary. The sand filling beneath it, and in the part of the drain that was abandoned when the cut-off was made, produced no coins later than the middle of the first century after Christ, and we proposed a dating in the second or early third century for the construction of the channel (see p. 266 above). The first phase of the bath, then, must date from the same time: pre-Herulian, late second or early third century. To this period belong all the foundations under the flat concrete floors. The floors themselves, and the blocks of rubble and cement under the frigidarium and around the well, belong to a post-Herulian reconstruction; in the mass of rubble and concrete were incorporated fragments of pottery as late as the fourth century. In places under the floor, however, there was a certain amount of debris from the destruction of the earlier bath—bits of marble revetment and paving, of round hypocaust and mammary wall tiles—which had been sealed over when the later structure was built. The establishment, then, seems to have been originally pre-Herulian, destroyed in the sack of A.D. 267 and rebuilt in the form in which we found it in the fourth century after Christ. The well of the bath produced pottery of the fifth century after Christ.

THE WEST BATH

Plan, Fig. 1

The smaller and simpler bath which lay to the west of the Street of the Marble Workers at its bend was in the same condition of destruction as the other. The Byzantine pilferers had left only the heavy rubble and concrete substructure and floors, and taken all the walls. The south end of the building lay just outside the edge of a Byzantine trench, and thus part of the tiling over the concrete floor, some of the hypocausts and a bit of the walls were still preserved.

The building was L-shaped, with two rooms at the east side and a third at the northwest. No doubt these were the rooms in which water was used; caldarium at the south, tepidarium at the corner, frigidarium to the east of it. The other rooms, which must have existed, were built of dry stone or reused blocks rather than of rubble and concrete, because they did not need to be waterproof or to have underground heating arrangements; in consequence they were easy prey to the plunderers of Byzantine times, and no trace of them remained. The well lay in the hollow between the wings of the L; it could not be dug beyond a certain depth because of the soft treacherous character of the bedrock. To the depth dug, it produced only destruction debris of the bath itself, with sherds of the fifth century after Christ.

The south end of the southern room contained two rows of hypocaust columns, five in each row, preserved to a height of 0.45 m. (Pl. 85c). Under them the tile flooring laid over the concrete bedding was preserved; in the plundered northern part of the room only the impressions of the tiles remained in the concrete. An opening in the south wall 0.51 m. wide connected with the furnace, which lay outside at the south; part of its east wall was preserved, and its floor, slightly hollowed by the heat of the fires which had been built over it. The presence of the furnace here is helpful in identifying the south room as the caldarium since the hottest room presumably lay nearest to the furnace. All the area outside the room to the south was covered with layers of ash which had been thrown out from the furnace. The caldarium itself measured 3.98 by 2.24 m.

The destruction fill of the bath itself, which overlay the hypocausts and the floor at the south end of the caldarium, very granular from the dissolved concrete and mortar, contained fragments of mammary tiles and bits of marble revetment. The bath was evidently abandoned or destroyed in the fifth century. We found no evidence as to the date of its original construction because it stood up like a concrete island in a sea of Byzantine fill, except at the south where it was not dug. In its present form the bath is no doubt post-Herulian; we have no evidence that the West Bath had an earlier, pre-Herulian phase.

LATEST HISTORY OF THE AREA

One of the turning-points in the late history of Athens was the destructive raid of the Heruli in A.D. 267. A result of this raid was the abandonment of the ancient Agora and the region to the south of it, which were left outside the new fortification of the city, the so-called Valerian Wall. Our area was not, like the Agora, a good source of material for the building of the wall, and it perhaps lay desolate for some time. In the late fourth and fifth centuries the return of a measure of security and prosperity brought a brief and final period of rebuilding. The areas of rebuilding in our section at that time are of interest in that they show that the old streets continued in use as arteries of traffic and communication. Houses were patched up or rebuilt all along Piraeus Street, to some extent encroaching into the roadway from both sides and narrowing its width; this narrowing perhaps reflects a dwindling of the traffic which passed over it. Similar traces of a late rebuilding were observed all along the west side of Areopagus Street, over Houses N, O, and U. Even the Street of the Marble Workers was still in use, and bordered by houses: a long string of these extended southward between the street and the Great Drain from the intersection with Piraeus Street. Still farther to the south all traces of the houses themselves have vanished, but their wells remain; wells to the north of House F, in House G, in House E, and between Rooms 1 and 12 of House C, produced pottery of the fifth century after Christ, indicating habitation on the spot at that time. The Great Drain itself seems to have been covered over at about the same time; reused slabs span it in some places, in others cuttings for beam-ends in the face of the west wall (Pl. 81a) show that in late times it carried a wooden roof. The houses along the east side of the Street of the Marble Workers in this period no longer confined themselves to the narrow strip between street and drain; they expanded toward the east by covering the drain and building over it. The maze of late house walls over the Poros Building has already been mentioned; it extended eastward as far as the corner of Piraeus and Areopagus Streets, which was occupied by a Roman bath. Like the bath in the central part of the area, this seems to have had two building periods—an early Roman, surely pre-Herulian, and a later reconstruction after the destruction by the barbarians.

This account of the late reflowering of Athens may seem out of place in an explanation of the causes of the destruction of the older buildings and houses; but it must be remembered not only that the foundations of the latest buildings cut down into the remains of the earlier, but also that the new houses were made almost entirely from reused material, often stolen from the ruins of earlier periods. Thus in the areas where new houses were built the older ones were damaged by their foundations, and in the areas which lay open and abandoned even greater damage was done by the search for building material for reuse.

The events of these late times are reflected by the filling of the Great Drain in those places where its natural accumulation has remained undisturbed, especially at the bridge of Piraeus Street and just to the south of it. Here the filling divided clearly into four layers. At the bottom lay a late Hellenistic and early Roman deposit only 20 cm. thick, evidently allowed to remain as a new floor-level at the time of the post-Sullan reconstruction of the bridge. Above this lay an accumulation 0.50 m. thick of pre-Herulian times; it produced thirty-six coins, of which the latest was one of Lucius Verus (A.D. 161-169). The third layer was 0.60 m. thick, probably the accumulation of the time of the Herulian destruction; it seems to have formed quickly, and it contained plentiful small stones and broken tile, perhaps destruction debris thrown into the drain or washed down from above by the water. Of fifty-seven coins from this layer many were third century; the latest dateable coin was one of Alexander Severus (A.D. 222-235). A coin of Aurelian (A.D. 270-275) might have belonged to this layer, or to the one above which was a gradual accumulation of post-Herulian times. The drain at the bridge was eventually entirely choked to its full height by this accumulation; the water ran at a very high level for some time just under the cover slabs of the bridge, which show a very heavy water wear and some lime deposit on their under faces. Of twenty-two coins from this level three were Roman of the fourth century, one was Vandal, one was a Maximianus Heracleus (A.D. 268-305); and one other, of Arcadius (A.D. 395-408), may probably also be assigned to this fill. The drain, then, continued in use down into the fifth century after Christ to carry off the water flowing down from the south.

The closing of the Academy and the forbidding of the teaching of philosophy in Athens, attributed to the Emperor Justinian, seems to have brought an end to this final period of prosperity.¹³⁹ Over the greater part of our area the houses were abandoned, after being picked over for anything of use or value, and the drains were no longer kept open and clean. The result was a rapid silting-in of the whole southern part of the area in the sixth and seventh centuries. The accumulation of fine silt brought down from the hills around reached in places a depth of more than five meters (section, Fig. 2); it contained sherds of the fifth and sixth centuries, mixed with many earlier, and coins mostly of the fourth and fifth centuries, including coins of Theodosius II (A.D. 400-450) and Leo I (A.D. 457-474), and even one as late as Constant II (A.D. 641-668). This filling had evidently accumulated over the various areas as they had been left abandoned and plundered. To the south of the eastern Roman bath it immediately overlay the Hellenistic levels over bedrock; farther to the south it overlay the remains of House T and the early Roman drain with its later water

¹³⁹ See, however, P. Charanis, *Amer. Hist. Review*, LII, 1946-7, pp. 74 ff. and especially p. 83. A thorough review of the literary evidence suggests that the Athenians may have sheltered themselves behind the "Valerian Wall" due to the threat of raids by Avars and other roving bands of barbarians, leaving desolate the areas outside. I owe this reference to Homer A. Thompson.

channel. The northeast part of the area alone seems still to have been inhabited, and Piraeus Street open; a new wall, perhaps as late as the sixth century, bordered that street at the south, passing without a break across the north end of the Street of the Marble Workers and over the Great Drain at the bridge. Piraeus Street, indeed, seems to have been the most necessary of all our routes: a street followed its line in Turkish times, and to this day it is represented by Asteroskopeion Street.¹⁴⁰

Even the tradition of artisans plying their crafts in this area seems to have lasted into late times. Over the eastern edge of the Poros Building was found a kiln in which pottery or tiles had been made as late as the ninth or tenth century. Part of the fire-chamber itself was preserved, with the alcoves and vents which conducted the heat to the oven proper; and associated with it were a number of crude clay props which had served to keep apart the pots or tiles stacked in the kiln for firing. A large number of big round pits scattered throughout the southern part of the area was made at this time or slightly later; it has been suggested that they were made by the potter digging earth to get raw material for his work. More likely, however, these were dug a little later, when the area of the Poros Building proper and a strip to the west of it along Piraeus Street were occupied by a settlement of Byzantine houses dating from the eleventh century onward. The settlement was enclosed at the south by a light wall which passed over the middle of the eastern Roman bath in the central part of the area. For a stretch of about twenty meters northward from this enclosing wall, as far as the houses which it surrounded, almost all the filling had been dug out practically to bedrock. The remains of earlier houses were stripped of every stone that could be of use; the Roman bath was razed to its hard core of concrete. Over this stretch the walls of the Great Drain have been plundered of nearly every stone, whereas to north and south they stand to a height of 1.50 to 2.00 m. The area actually covered by the Byzantine houses was not plundered; apparently the lines of the settlement were laid out, then enormous pits were made in either direction, to north and to south, in search of building material for the houses. This was not a mere sporadic following of the lines of earlier walls to secure stones; it was a systematic stripping of a whole area. The refill thrown back was a heavy mixture of small stones, broken tiles and coarse potsherds. The explanation of these activities would seem to be that the earth dug out was screened for the making of mud bricks, and the coarse rubble which had been screened out, being useless, was thrown back. Thus the builders obtained stones for their foundations and the socles of their walls, and also the earth with which to make mud bricks for the upper construction.

To the south of the enclosure wall no great block had been dug out systematically, but a number of large pits of the same period and containing the characteristic filling

¹⁴⁰ The northern end of our Melite Street, passing the Hephaisteion at the west and running to the Dipylon, was perhaps represented by a street in Turkish times which appears on Fauvel's plan of the Athens of his time. (G. A. Olivier, *Voyage de l'empire Ottoman*, Atlas, Paris, 1807).

of stone and broken tiles was detected. These pits often overlapped at their edges, which suggested that the digging activities had gone on over a fairly long period of time. One of these big pits went nearly to bedrock in the southwest corner of House C, and had led to the plundering of about two-thirds of its west wall; another made a great bite-shaped arc in the floors of Rooms 2-3 of House T. In the course of the digging operations of Byzantine times several ancient wells were found; they seem to have been kept open for use, as they produced a quantity of coarse Byzantine well pottery. One of them lay between Houses J and K; another, beside the Roman drain at the west, was cleared out to a depth of eleven meters and reused in Byzantine times. Yet another, which had been the well in the courtyard of House Q, an early Roman house built over the Poros Building, was also reused in Byzantine times. It lay, however, in the area of the settlement itself and was apparently used by the houses. In order to bring the old well up to the late level, a height of nearly two meters, a new curb and well-head were added above the old.

The activities of the Byzantine settlers were destructive enough. Almost equally destructive was the flow of water eastward from the Hill of the Nymphs. All along the Street of the Marble Workers in its eastward slope into the valley, deep pits, made by water and filled with a waterborne deposit of sand and gravel, went almost to bedrock. The fill was fairly widely spread over the spur of the Hill of the Nymphs; in general it followed the course of the old drain under the street. The coins from the gravel deposit ran as late as the twelfth century; among them was one of Alexius I (A.D. 1081-1118).

No very great destruction was done after Byzantine times. Only at the north, where a large house or khan of Turkish times stood at the line of Piraeus Street, probably near one of the gates in the wall of Turkish Athens, a number of big pithoi had been set down into the deeper filling. Of the Turkish wall itself a short stretch was found, running eastward toward the lower slope of the Areopagus about over the line of the wall between the Poros Building proper and its court at the south. This wall did not go deep enough to disturb the antiquities below, but it was built entirely of re-used materials. It was astonishingly light; built in 1778 by the Turkish authorities, it was apparently not so much a fortification as a barrier for the control of ingress and egress from the town, in order to make sure that all traffic passed through the gates and paid any taxes due on produce transported to and from the city.¹⁴¹

The area was not thickly built up in modern times. A heavy accumulation of modern fill overlay it but there were no deep cellars to destroy the ancient remains below. The deepest cuttings of modern times were Dörpfeld's old trenches. We located four of these; the bits of ancient walls which were uncovered in their bottoms (including the south wall of the courtyard, with one corner, of the Roman bath)

¹⁴¹ Judeich, *Topographie*², plan IV.

appear on the plans of this part of Athens as isolated stretches.¹⁴² The latest excavators are responsible for considerable havoc among the latest antiquities; the problem is always with us as to how much of the later levels may justifiably be cleared away so as to make it possible to expose the earlier ones beneath.

CONCLUSION

The excavation of this large area was undertaken with the purpose of clearing a site for the permanent Agora Museum. In the end the site proved unsuitable. Not only were objections raised on esthetic grounds to the placing of a large modern building immediately at the foot of the Areopagus, but also on archaeological grounds, because the foundations of such a building would necessarily cut into and destroy most of a large public building as well as private houses of the fifth and fourth centuries which are unique at Athens and rare enough in the rest of the Greek world. The plan to restore the Stoa of Attalos to house the Agora collections is a happy one; nothing will be destroyed and nothing covered that was not covered at the time the stoa was first erected in the second century B.C. The excursion into the area west of the Areopagus, however, has given us invaluable glimpses into the private houses and workshops, the back streets and alleys, the drainage and water supply, of a busy and populous region just outside the Market Place. Excavation here has suggested something of the layout of the main streets of this part of ancient Athens, and of the problems of drainage which confronted the Athenians. It has given us a hint as to the date of the enclosure of the lower city within a defensive wall.¹⁴³ It has yielded full plans of houses of the fifth century, and demonstrated how advantage was taken of circumstances to alter and enlarge them at the beginning of the fourth. It has given glimpses, often enigmatic enough, of the industries plied in this industrial section of Athens from the fifth century before through the second century after Christ. Though never a part of the actual Market Place, this area immediately adjacent to it was one of the busiest sections of ancient Athens, frequented not only by the artisans who worked there, but also by the Athenian citizens passing upward from the Agora to the Assembly Place on the Pnyx. Its excavation has yielded a wealth of information which cannot but be a welcome addition to the finds from the official Agora, rounding out our picture of ancient Athens.

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¹⁴² Judeich, *Topographie*², plan I; *Ant. Denk.* II, pl. 37.

¹⁴³ *Hesperia*, XX, 1951, pp. 131-34.

NEOLITHIC SHERDS FROM THESPIAI

(PLATES 86-87)

NEAR the site of ancient Thespiai, on the south bank of the river Thespios opposite Eremokastro, there is a low mound which marks the place of a pre-historic settlement. As early as 1920 it was known to Professor C. W. Blegen, who first showed it to me. In recent years members of the American School have stopped there several times and have gathered samples of the fragmentary pottery that lies scattered over its whole surface. The piece illustrated on Plate 86 was picked up in October 1950 by Mr. Charles Fleischmann, who presented it to the School's study collection in Athens.

This fragment, which measures about 0.065 m. by 0.08 m., comprises only a small part of the rim and side of the vessel, a jar or deep bowl, which was originally some 0.18 m. in diameter at the lip. The rim was folded over by the potter and pressed against the outer side to form a thick roll. The shoulder is gently convex. Light reddish-brown clay makes up the biscuit, which is firm and well baked. The surfaces, unslipped and incompletely burnished, are pitted here and there with minute cavities from which presumably bits of vegetable matter were burnt out in the firing.

The top of the rim is decorated with short slanting lines which appear to have been impressed rather than incised. Immediately below, on the exterior, is a representation of a human face. The brows are heavy, ending at either side in projections that are almost hornlike. The forehead, where the brows meet, is unnaturally prominent and forms a sort of lug; the nose is disproportionately small. Eyes and mouth are formed by lumps of clay, deeply cut with horizontal slots and slightly worked. Bulbous eminences on either side of the mouth portray the cheeks.

Below and to the left of the face (as we see it) traces of another plastic element are preserved: a ridge running almost horizontally, then curving downward and meeting some further bits of modelling near the break. These features may have been merely decorative (cf. Kunze, *Orchomenos* II, pl. XIV, 3a) or perhaps represented part of the human figure: one of a pair of arms coming in from the sides of the pot.

For all its crudeness, the face has character and individuality. Its remarkable forehead and cheeks, the eyes so fashioned that the upper lids cast deep shadows, the narrow mouth with lips thrust forward and parted, all together produce an expression that is strange and arresting. How much of the total effect should be attributed to the deliberate intention of the artist, how much to chance and primitive

intuition, it would be rash to guess. Enough here to observe that the workmanship is deft and quick; it betrays no fumbling or hesitation, and is far from being naive.

There can be little doubt that the pot was a local Boeotian product of the Neolithic period. The color and texture of the clay, the pitted surface and the burnishing (clearly visible on the interior, Plate 86), are features characteristic of that age; sherds of the same ware are plentiful in Thessaly, at Orchomenos, at Chaeronea, and on the surface of this very site (e. g. Plate 87 Nos. 19, 21). No exact parallel for the Thespian face is yet known, but in style it may be compared with some of the idols found by Tsountas (*Dimini and Sesklo*, pls. 32-35) and by Wace and Thompson (*Prehistoric Thessaly*, figs. 74b, 76f, 77d, 91b and d, 114). The eyes of these, "blobs of clay with a gash in the middle," are like the Thespian's, but their noses are in most cases large. Tsountas illustrates one fragment of a pot with human features, from Sesklo (*DS*, fig. 228), but notes that its position in the strata could not be certified. Among the face pots from Troy (which belong to the Early Bronze Age) there are general resemblances but nothing that looks quite like our fragment.

A selection of Neolithic sherds picked up at the Thespian mound is shown on Plate 87. Wares of the early and late phases are represented: red, brown or black on buff or tan (Nos. 1-4, 6-8, 10-12); purple on tan (Nos. 9, 13); polychrome (No. 5); black and brown wares with incised, burnished and ribbed patterns (Nos. 14-18); plain burnished and coarse fabrics (Nos. 19-24). Present also, but in almost negligible quantity, are fragments assignable to the Early, Middle, and Late Helladic periods. Several stone celts and rough pounders or grinders, as well as numerous flakes of obsidian and flint, have also been found. A few fragments of archaic wares, probably datable in the seventh century, and considerable numbers of later Greek and Roman pieces occur, especially on the eastern side of the hill, toward the Classical site.

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INVESTIGATIONS AT CORINTH, 1950

(PLATES 88-94)

THE campaigns of excavation at Ancient Corinth, which before the war had gathered great momentum, have in recent years been reduced by necessity to little more than a cleaning-up process. However regrettable this may seem, there is some compensation in the fact that much of the terrain covered in those rapid campaigns of the nineteen-thirties is now being subjected to final investigation, and steady progress is being made toward the definitive publication of the site. All the buildings in and about the Corinthian Agora have either been published or are now being studied. The largest of these structures is the South Stoa with its complex of shops and storerooms in the rear, over which a series of public buildings, mostly of an administrative nature, was erected in Roman times. The area covered by these structures measures *ca.* 165 x 35 m., a total of nearly one and a half acres. In the limited but fruitful campaigns of 1946-1948¹ a detailed investigation was made of a little more than two thirds of this area, and the remaining section, extending from the Bouleuterion in the east to shop XXX in the west, was finally cleared in the spring and summer of 1950.²

The campaign lasted from April 20 to the end of June, but the number of workmen engaged did not at any time exceed five. Our immediate purpose was to expose all the foundations and cuttings that were to be rendered on the plan and, in the second instance, to obtain what further evidence there existed for the history of the building. A few important blocks were recovered, one of which preserves the only evidence so far discovered for the presence of a window in the wall between the shops and the store-rooms. In the rear of the building were uncovered some of the paved areas behind each shop and store-room unit providing for the disposal of garbage. A deep covered drainage canal runs along the outer edge of these areas. In the wall enclosing the area behind shop XXVII was discovered a well preserved latrine, the seat, sides and back of which are cut out of a single poros block covered with a hard stucco (Pl. 88a).

¹ *Hesperia*, XVI, 1947, pp. 233-247; and XVIII, 1949, pp. 148 ff.

² In the field work the author was assisted by Robert Carter, Ryerson Fellow from the University of Chicago for 1949-50. The architects were Elias Skroubelos (assisted for a few days by Arghyris Petronotis) and George V. Peschke. Valuable advice and assistance were rendered by Gorham P. Stevens, Honorary Architect of the School, and by John Travlos, Architect of School Excavations. The inventories were made by R. Carter and Chrysoula Kardaras. The foreman in charge was Evangelos Lekkas. The guards of the Museum, George Kachros and Evangelos Pappasomas, mended the pottery and cleaned the coins on hours when they were not occupied with their duties in the Museum.

In the course of the excavation it became clear that a large section of the Stoa west of the Bouleuterion together with its later additions had been destroyed at the incursion of the Herulians in A.D. 267.³ After that event the débris had been allowed to accumulate to a height of *ca.* 1.50 m. above the earlier floor level. About the end of the third century the Stoa was apparently torn down and the material used to construct a massive wall, still standing to a height of 2.25 m. (Pl. 88b), on the foundation for the front wall of the shops. At a still later period, *ca.* A.D. 300, a Roman bath was constructed which continued in use probably as late as the reign of Justinian.⁴ The bath with its hypocaust is comparatively well preserved, showing an arrangement for heating the water in a small tank from which it was piped to other parts of the building. Though late and of small size, the building is important for the history of the city. There were other, larger and more elaborate baths, notably the two constructed by Eurykles and the Emperor Hadrian, but this is the first Roman bath to be completely excavated in Corinth. A successor to this building has been found a little to the north of the Stoa, directly in front of shops XXII and XXIII, but the remains are very scanty. Its south wall rests partly on the foundations for the front columns of the Stoa which had already been removed before the bath was constructed, perhaps in the sixth century after Christ.

The area west of the earlier of the two baths, originally occupied by shops and storerooms XXVIII-XXX, presented a perplexing picture of Roman concrete bedding, here and there broken through by medieval burials. The nature of this complex has now been made clear. The northern half consisted of an entrance hall with an impluvium in the center, and two stairways in the rear gave access to a higher area on the south. Here was an open court surrounded by a colonnade, in the rear of which runs a deep channel lined with bricks. This large structure, extending into the unexcavated area south of the Stoa, was a public latrine dating back to the time of the Antonines. Its walls and floors were encrusted with marble and other stones in a variety of colors, but of this decoration only some of the bedding and broken pieces of veneer remain.

The most striking of the season's discoveries are only indirectly connected with the Stoa or with its Roman successors. Most of them came from wells and from the early fill of the Stoa proper. One small pocket proved to contain an undisturbed deposit of Early Helladic pottery, mostly fragments of small bowls with curved-in

³ See *A.J.A.*, XL, 1936, p. 481; XLI, 1937, p. 539; *Hesperia*, X, 1941, pp. 145 and 390; *A Guide to the Excavations of Ancient Corinth*, 4th ed., p. 70.

⁴ This would seem to follow from the discovery of a hoard of coins in the hypocaust of the easternmost chamber; see *A.J.A.*, XLII, 1938, p. 363; and *Hesperia*, X, 1941, p. 145. The coins, extending in date through several centuries, seem to have been buried in the sixth century, the latest being six coins of Justinian I (A.D. 527-565). The hoard had probably been hidden while the bath was still in use, in any case before the destruction débris had accumulated to the extent of rendering the hypocaust inaccessible.

rim, together with a few pieces of sauce-boats and other E. H. shapes. In a near-by sector were found some fragments of Late Mycenaean, Submycenaean, and Proto-geometric vases. The earliest of these (Pl. 89a) is from a small krater with vertical handles and decorations below the rim, probably arranged in a metope pattern. Most of the sherds belong to small bowls on conical foot, all covered with glaze except the base, one or more reserved bands on the outside, and a circular reserved area in the center of the interior. A bowl of similar shape, some small fragments of which are shown in Plate 89b (top row), has a wavy line on a reserved band in typical Submycenaean style. Other fragments from the same deposit are decorated with concentric circles (Pl. 89b, bottom row) applied with a multiple brush, and one large pitcher had a series of quadruple triangles on the shoulder. The earliest pieces of the deposit seem to antedate by a little the vases found in 1938 around a hearth west of the Museum.⁵ Pottery of this period has been found in Corinth in very small quantities, and the fragments from this year's campaign will thus help to bridge a gap in the ceramic history of the city.

The earliest of the seven wells and man-holes excavated this year dates from Geometric times. It is larger than the other wells, having a diameter of 1.10 m. At the top, to a depth of 0.75 m., the shaft was lined with small flat stones, carefully fitted together. The contents are almost all Geometric, from the end of the ninth to the end of the eighth century B. C. Among the vases well enough preserved to be restored are four skyphoi. The largest (Pl. 89d, upper left), with a diameter of 0.21 m., has a low, offset rim decorated on the inside with short sections of vertical strokes on a reserved line.⁶ The rest of the interior is covered with a red glaze which has a tendency to peel off. On the outside are some horizontal reserved lines and at the level of the handle a broad band with broken vertical lines. The lower part of the vase is covered with glaze of a dark brown color shifting to red in spots. The base is flat underneath and slightly offset. A smaller skyphos (Pl. 89d, upper right; Diam. 0.127 m.) with offset rim is entirely covered with dark brown glaze except for two reserved lines on the rim. The base is concave underneath.⁷ One complete specimen (Pl. 89d, lower left) has a more rounded body on a raised base and a very low, slightly turned-out, rim with a reserved line on the inside and a similar very narrow line on the outside. The rest is covered with a dark brown glaze.⁸ The fourth skyphos (Pl. 89d, lower right) is somewhat similar in shape, but the rim is very slightly turned out, and the base is almost flat. The upper part of the vessel

⁵ See Saul S. Weinberg, *A.J.A.*, XLIII, 1939, pp. 598-99, figure 10; and *Corinth*, VII, i, pp. 3 f. and pl. I.

⁶ For the shape cf. Saul S. Weinberg, *Corinth* VII, i, pl. 8, No. 43.

⁷ The shape is similar to that of several Early Geometric skyphoi published by Weinberg, *op. cit.*, Nos. 43, 59, and 60, pls. 8 and 10.

⁸ This is very similar to Weinberg's No. 40, pl. 7, but the handles are set at a slightly higher level on the new cup.

has a series of reserved lines and a zone of broken vertical lines a little below the rim.⁹ Among the sherds from the same well are some decorated with meanders and rosettes in metope formation and a few with figures of ducks. There are also a very few Protocorinthian fragments.

A well dug at the east end of the Stoa, a little to the north of shop IV, contained a considerable amount of pottery, mostly from the second quarter of the sixth century B. C. Though the bulk of the vases are of local manufacture, a surprisingly large percentage is Attic. One skyphos (Pl. 89c, right) is entirely covered with black glaze, and at the level of the handles was a double line of purple which has disappeared but has left traces on the black glaze. Both handles had been broken and mended before the vase was discarded, indicating that it was comparatively valuable, though plain. Undecorated vases of local make do not often show signs of repair.

Among the Attic pottery from the well are several stemless cups (Pl. 89c, left) with offset rim, small horizontal handles, and no other decoration than some reserved bands on outside and several double lines of purple glaze on the inside. The cup shown on Plate 90 belongs to the Siana type of skyphos.¹⁰ On the rim is a broad band of alternating open and closed lotus buds, the latter outlined in white. The pattern is interrupted at the handles, and at one point (Pl. 90 top, at the left) two closed buds come together. The handle zone carries an animal frieze consisting of a swan between grazing deer. On the wings of the swan and on the neck of the deer are splotches of purple, and on the body of the deer on the left are traces of two rows of dots in white, but the color has disappeared. The decoration was apparently the same on both sides, but most of one side is missing. In the tondo (Pl. 90, center) is a figure of a hen with purple on the wings and traces of white on the neck. Incised lines are used sparingly. The drawing is careless, but the total effect is rather pleasing. From the well came fragments of two other Attic kylikes of the same general type but with ivy leaf ornaments on the rim.

The two fragments shown in Plate 91a are from a Laconian cup decorated with the conventional designs common on this class of vases.¹¹ The background of the handle zone is the red color of the clay, but the lower part of the vase was covered with a white slip on which the designs were applied in black glaze.

The Corinthian pottery from the well comprises several small kotylai (Height

⁹ For the shape see the preceding, and for decoration cf. Weinberg, *op. cit.*, pl. 10, No. 60.

¹⁰ On this type of vase see J. D. Beazley, *J.H.S.*, LI, 1931, pp. 275 ff.; and *Met. Mus. Studies*, vol. V, pp. 93 ff.

¹¹ For the design on the handle zone see E. A. Lane, *B.S.A.*, XXXIV, 1933-34, p. 173, fig. 22, 10, for which Lane suggests a date after the middle of the sixth century. In view of the earlier date of the other pottery from the well this seems too late a date for the fragments from Corinth. Too little remains of the palmette beneath the handle to indicate the type. For a discussion of these designs see Lane, *op. cit.*, pp. 174-5 and fig. 24. Cf. also E. Pfuhl, *Mal. und Zeich. der Gr.*, III, pl. 46, No. 195.

ca. 0.07 m.) decorated in black and purple glaze which has mostly peeled off (Pl. 91b). The principal zone is occupied by fantastically elongated animals of undeterminable species.¹² Most of the vases of this shape have rays at the base (Pl. 91c) and horizontal lines of purple applied over the black or brown glaze that covers the rest of the surface. In a few instances the whole vase was glazed except the base (Pl. 91d, left). One jar with upright handles (Pl. 91d, right) has a leaf design on the shoulder with alternating black and purple pairs of leaves, and below the handle is a zone of alternating black and purple buds on tall stems. The oinochoe in Plate 91e is covered with brown and black glaze on which are several horizontal bands of purple. There were fragments of several larger vases, most of which belong to column kraters. Some of the handle plaques are decorated with animal figures and one (Pl. 91f) with colors well preserved has the figure of a siren. The body is white and details are rendered with lines of black glaze and incisions. The hair and the wing are in black, but purple is used for alternate sections of the wing. The drawing is very similar to that on a late Corinthian amphora in the Louvre,¹³ but the details are less carefully rendered. Payne (p. 110) has listed a number of vases by the same hand, to which our fragment should probably also be ascribed.

One of the best preserved and the most significant of the vases from the well is an amphora (Pl. 92) of a type assigned by Payne to Middle Corinthian.¹⁴ The rim has a convex profile and the handles extend from just above the widest part of the body to the middle of the neck. Below the rim and on the body are traces of horizontal lines, probably purple, but the color has vanished. On either side is a panel extending half way up the neck. At the top of each panel is a net pattern with circular blobs at the intersections. This design is set off from the panel by a double line of dilute glaze. There is another double line at the bottom and a single line on either side. On one of the panels (Pl. 92, left) is figured the front half of a horse with a bearded rider holding a spear in his right hand and the reins in his left.¹⁵ No accessory colors are preserved, but the effect of the purple can be observed on the neck of the horse and on the body of the rider. Below the horse is a single rosette. On the second panel (Pl. 92, right) is the figure of a lion to right, looking back. There are traces of purple dots on the mane. In the field are four rosettes and the tuft on the head of the lion is rendered in much the same way as the rosettes. There is a run of glaze from the rim onto the net pattern above the panel.

The amphora belongs to a rather uncommon type, originally considered to be

¹² For the type cf. Humfry Payne, *Nekrokorinthia*, pp. 308-9, kotylai type D, and fig. 150.

¹³ Humfry Payne, *op. cit.*, pl. 40, 1, and p. 110.

¹⁴ Inv. No. C-50-101; H. 0.306 m.; Gr. Diam. 0.203 m.; pinkish buff clay; dark brown, lusterless glaze. For the type see Payne, *op. cit.*, p. 316, No. 1154.

¹⁵ This unusual abbreviation of the horse and rider motif occurs on a Corinthian aryballos from Delos (*Delos X*, pl. XXIV, 304; cf. Payne, *op. cit.*, p. 288, No. 498). I owe this reference to the kindness of Chrysoula Kardaras.

Attic but now, after Payne, identified as Corinthian. An amphora in the University Museum in Philadelphia ¹⁶ is identical in shape to ours and carries the same kind of net pattern above the panels. On one of the panels is a protome of a horse with elongated head, but in other respects it differs considerably from the horse on the Corinth amphora. The Philadelphia amphora has been dated in the decade 580-570 B. C.

The well containing this decorated pottery also produced some coarse household ware, two examples of which are shown in Plate 93a. One is a large pitcher of very coarse, gritty clay and void of decoration. The other is a spouted pitcher of somewhat finer clay of a pinkish buff color. Below the handle are two broad bands in red, and on the neck and shoulder are rows of short brush strokes in the same color. Several lamps of types II-IV ¹⁷ (Pl. 93b) came from the same fill in the well and should thus be dated before the middle of the sixth century B. C., the lowest likely date for the deposit.

The pottery described above was found at a depth of 0.50-6.00 m. The first half meter of the fill at the top of the well contained pottery from about the middle of the fourth century B.C. Many pieces are of Attic manufacture (Pl. 93c and d, right); others are local limitations of the imported ware (Pl. 93d, left). This small deposit is of particular interest, because it was probably thrown into the well just prior to the construction of the South Stoa and will therefore serve as a convenient upper limit for the date of the building.

A deposit from the sixth century B. C. was excavated in the Stoa a little to the north of shop XXVI. It contained fragments of several column kraters (Pl. 93e) with figured decoration on the handle plaques and rows of wavy lines on the rim. The most significant object from this deposit is a terracotta stand (Pl. 94a), probably designed to support a lebes. A short Doric column with an archaic form of echinos and with sixteen flutes stands on two low steps and a third step may have existed in the form of a separate stone base. On the four corners of the abacus are lions' paws arranged around a drum with horizontal ribs, and at the top is a circular rim with serrated edge. The top is concave to fit the rounded bottom of the lebes which presumably was of metal. The diameter of the rim, measuring *ca.* 0.39 m., indicates that the bowl must have been at least 0.60 m. wide at the widest part. Although only a few fragments of the original stand were recovered, these were so distributed that the whole stand could be restored in plaster. The only uncertain element is the exact height of the column, the shaft of which as restored measures 0.96 m. in height. The whole stand, restored to a height of 1.35 m., was hollow from top to bottom. There is no painted decoration on the preserved fragments. A detailed study of this unique object will be made by Robert Carter.

¹⁶ Edith H. Dohan, *A.J.A.*, XXXVIII, 1934, pp. 526-27, and pl. XXXIII.

¹⁷ *Corinth* IV, ii, Nos. 44-90.

Three vase fragments from pits sunk below the original floor level of shops XXV and XXVI contain the following fragmentary inscriptions: 1) [Δ]OC CΩTHPQ[C]; 2) ——— AΞ, probably the end of some word like [φιλί]ας or [᾿Ασφαλεί]ας; and 3) ·INΩ, followed by the lower part of an upright stroke, perhaps [O]ινῶπ[ος], an epithet of Dionysos. The sherds belong to vases similar to those found in many of the shop wells of the Stoa. Despite the depth at which they were discovered, they must have been part of the débris accumulated during the period that the shops were in use as taverns. Small as they are, these inscribed pieces deserve notice because they offer further evidence for the common practice in Hellenistic times of inscribing invocations to certain deities on vessels used at drinking parties.¹⁸

One important piece of sculpture was discovered in the hypocaust of the Byzantine bath north of the Stoa. It is a fragment of a marble relief (Pl. 94b) preserving the upper part of a dancing maenad with her head tossed back and her garments ruffled by the wind.¹⁹ The face is badly chipped along the edge, elsewhere the surface of the marble is well preserved. The hair and the drapery are rendered with great delicacy in typical Neo-Attic style. The right side of the face is shown in full profile, but the left eye is also indicated in a somewhat less than realistic manner.

The figure is shown in motion whirling rapidly to the right, thus causing the drapery to be blown back over the left arm. The hair, on the other hand, is treated as if unaffected by this movement. It is held together with a clasp at the nape of the neck and the lower part falls loosely over the back. On the left side of the face a mass of hair is represented as being blown forward, as if the figure were moving in the opposite direction. The copyist, better acquainted with the technique of marble cutting than with the laws of gravity and motion, has tried to improve upon the original work of art that served as his model. We know what this original looked like from two better preserved copies which do not differ from each other except in minute details of the drapery and, consequently, must be faithful copies of the same original or — a less likely alternative — one a copy of the other. One of these (Pl. 94c), which was found in Rome and brought to Spain three centuries ago, is now in Madrid,²⁰ the other was discovered in 1935 by Italian archaeologists at Tolemaide in the Cyrenaica.²¹ There can be no doubt that the Corinth relief is derived from

¹⁸ For a discussion of this practice see Martin P. Nilsson, 'Die Götter des Symposiums,' *Symbolae Philologicae, O. A. Danielsson Octogenario Dedicatae*, pp. 218-230, and the earlier literature cited by him. Several new names can now be added to Nilsson's list; see Broneer, *A.J.A.*, XXXVII, 1933, p. 564; XXXIX, 1935, p. 71; *Hesperia*, XVI, 1947, p. 240; and Saul S. Weinberg (G. Roger Edwards), *Hesperia*, XVIII, 1949, p. 151.

¹⁹ Preserved H. 0.50 m.; W. 0.32 m.; Gr. Th. 0.12 m. White marble, presumably Pentelic; rough back; upper edge of slab partly preserved.

²⁰ Franz Winter, "Über ein Vorbild neu-attischer Reliefs," *Berlin Winkelmannsprogramm* L, 1890, pp. 97-124, and pl. II, left; Giacomo Caputo, *Lo scultore del grande bassorilievo con la danza delle menadi in Tolemaide di Cirenaica*, pl. XII, fig. 22.

²¹ Giacomo Caputo, *op. cit.*, p. 8, and pl. VII, fig. 12. Terracotta fragments of a similar figure

the same original. The position of the dancing figure is the same as in the other two copies; the folds of the garment, most clearly visible around the left arm, are practically identical; and the circular disc earring, not worn by all the figures of the series, is the same on all three copies. Even the scale of the figure seems to have been reproduced with but slight variation.²²

There are, however, important differences between the Corinth copy and the other two. In the reliefs in Madrid and from Tolemaide the maenad wears a *nebris*, the feet of which are tied above the right shoulder, and in front the skin is spread out in a broad curve. In the Corinth copy the *nebris* is omitted. This may provide an explanation for the illogical addition of the hair on the left side of the face which the copyist seems to have invented to restore the balance. In the original figure, as represented by the Madrid and Tolemaide reliefs, all the hair is held together with a clasp and the lower part is spread out horizontally in a perfectly natural manner; none is shown on the other side. The change in the arrangement of the hair gives to the Corinth figure the effect of arrested or reversed motion, strangely at variance with the restless form of the drapery. The Corinth maenad also lacks the ivy wreath which is present in the other two copies. Furthermore, the rather forced attempt to show part of the left side of the face seems to be peculiar to the Corinth version.²³

The nature of the monument to which the fragment belonged is not apparent. The same series of dancing maenads has been employed both for rectangular and for circular monuments. In the restoration of the monument at Tolemaide Caputo has shown that there were originally eight slabs,²⁴ seven of which were recovered, all in fragmentary condition. They had formed a circular monument with a circumference of *ca.* 7 m., obviously not a puteal but probably a statue base. The Corinth monument was definitely not circular. Another small fragment, discovered in one of the early campaigns in the vicinity of Peirene, may with some probability be assigned to it, although the head is here turned in the opposite direction.²⁵ As in the new fragment an attempt was made to show both sides of the face, as will appear from the following description in the Corinth publication: "The relief is so managed that

are in the Museo Nazionale in Rome, see Gisela M. A. Richter, *A.J.A.*, XL, 1936, pp. 17-18, figs. 7 and 8.

²² The figures in various copies of the series vary in height between 1.295 m. and 1.315 m. See Caputo, *op. cit.*, p. 15, and Richter, *op. cit.*, p. 11, note 7. In the total height of the slabs the variation is greater, depending on the presence or lack of a molding above and below. The scale of the Corinth figure is about the same as that of the copies listed by Richter.

²³ So far as it is possible to judge from the published photographs the face of the figure in the other copies was treated in the conventional manner of low reliefs.

²⁴ *Op. cit.*, p. 16, and plates XIV-XV, fig. 28.

²⁵ In the other monuments on which the dancing maenads appear the figures do not all move in the same direction. Cf. Caputo, *op. cit.*, fig. 28; Richter, *op. cit.*, p. 16, fig. 6; Hauser, *Die neu-attischen Reliefs*, pl. II.

the chin is fully shown, while the background just touches the corner of the mouth and cuts the right eye, which is not clearly worked out."²⁶

There has been much discussion about the date and authorship of the prototype from which all these copies were made. The conjecture first made by Furtwängler that the artist was Kallimachos has found many adherents,²⁷ but, until some more substantial basis has been found for recognizing the art of this master than the archaizing relief of Pan and the Graces in the Capitoline Museum and some vague references to his style by ancient authors, the attribution must necessarily rest on slender evidence.

In his monograph on the monument at Tolemaide Caputo rehearses the various arguments relating to the date of the existing slabs, and he concludes that they were made by some artist who had access to the original. Consequently they did not originate in Africa on the site where they were found but must have been carved in Athens where the original monument of Kallimachos supposedly existed. Caputo disclaims connection with the Neo-Attic type of relief, which he considers to be of later date and of inferior quality. The monument at Tolemaide he ascribes to the period of the great altar at Pergamon. The new fragment from Corinth will hardly cast much light on this question, but its discovery provides further evidence for the importance which the ancients attached to the original creation wherever that may have been set up.

A second investigation of shorter duration was conducted in the Julian Basilica by Saul S. Weinberg who has contributed the following account of his work.

In the two weeks from July 24 to August 7, 1950, a trench nine meters long and averaging 3.50 m. wide was dug to the east of the central section of the Julian Basilica. It was at the center at the east side of this building that six curved epistyle blocks, as well as curved wall blocks, had been found in the original excavations of 1914-15. The investigations of 1948 revealed the ends of an apse connected with a late Roman wall built parallel to, and three meters east of, the Basilica east wall; the apse was about at the center of the Basilica (Weinberg, *Hesperia*, XVIII, 1949, p. 155). This apse was cleared entirely and proved to be a segment (about one-quarter) of a circle with radius of *ca.* 3.80 m. Four of the six epistyle blocks have a very similar curvature and together would just fit the apse, where they were most probably re-used. However, no foundations for the original curved colonnade and wall were found and their position is still unknown. Only the position of finding of the curved blocks and the existence of a later apse argue that the original apse, most probably semi-circular, was centered on the east wall of the Julian Basilica.

²⁶ Franklin P. Johnson, *Corinth IX, Sculpture*, p. 121, No. 246. Though the head on this fragment may be that of a maenad, it does not resemble any of the other heads of the series. Consequently, if the two fragments come from the same monument, the figures represented on the reliefs were probably derived from different sources, not necessarily of the same period. Johnson agrees with Elizabeth Gardiner (*A.J.A.*, XIII, 1909, pp. 159-161), who regarded the fragment a Greek original from the "decade after 440 B.C."

²⁷ The matter is discussed at length by Caputo, *op. cit.*, pp. 24-30; cf. Richter, *op. cit.*, pp. 14 ff.

The other important information obtained from the small trench was that there existed an important road along the east side of the Basilica throughout Roman and Byzantine times. There were at least nine superimposed road levels, mostly late Roman and Byzantine, but most important of all is a small section of a pavement made of the same hard, white limestone slabs as were used on the Lechaion Road and the Roman Agora pavement. The road level at this time was approximately even with the top of the cryptoporticus of the Basilica. It seems most probable that the level of the main floor of the Julian Basilica had been originally raised three meters above the Agora pavement in order to bring it to the level of this road, from which there was most likely an entrance through the central exedra of the Basilica. There is evidence that the same situation existed south of the South Basilica and that both buildings served, among other uses, as monumental entrances into the Agora.

OSCAR BRONEER

UNIVERSITY OF CHICAGO



a. Area from NW.: To left, Areopagus; in middle, Hill of Muses and Pnyx; to right, Foot of Hill of Nymphs (1947)



b. General View of Area of Poros Building from SW. (1948). Arrows mark position of corners

RODNEY S. YOUNG: AN INDUSTRIAL DISTRICT OF ANCIENT ATHENS



a. Great Drain, looking N. at Bridge: Corbelled W. Wall (left)



b. Corbelled Construction beside the Eridanos at the Kerameikos



c. N. End of Bridge over Drain, from NW., showing Channel Blocks and Reused Marble Grave Stele



d. The Same, looking W.



a. Bridge and W. Wall of Drain from E., showing Hellenistic Channel Block and Ends of Terracotta Channels E. of Drain



b. Reused Poros Blocks in Top Course of W. Drain Wall



c. Looking S., showing Divergence of the Great Drain (left) and the Street of the Marble Workers (right); Hellenistic Channel Block in foreground, N. Foundation of House H above



d. Looking E., showing Hellenistic Channel Block; Street Drain of Street of Marble Workers in foreground



a. N. End of Bridge over Drain, showing Cuttings in Face of Long Channel Block



b. Foundation of V-IV Century House at NW. Corner of Bridge



c. Looking W. showing Roman Tile Water Conduit at Bridge over Drain: Hellenistic Channel Block, left; Late Roman, right



d. Looking E.: Bridge Covers and Post-Sullan Street Level, showing Wheel-ruts on Bridge. Left, Long Channel Block, in foreground Reused Bedding Block for Columnar Grave Stele



a. Poros Building from S. (1949). Arrow points to NE. Corner of Court



b. S. Rooms of Poros Building from SW.: (a) Corner Blocks of SW. Room, (b) E. Wall of SE. Room, (c) Light Rubble Wall at Entrance from Corridor to Court, (d) Wall between Two S. Rooms in W. Wing



a. Poros Building: Corridor from N., (d) Corridor Drain



b. Poros Building: Central Part of Corridor from S. (a) Doorjamb in III Room from S., E. Wing; (b) Doorjamb on N. Side of Door in IV Room from S., W. Wing; (c) Doorjamb (?) between IV and V Rooms from S., W. Wing; (d) Corridor Drain

RODNEY S. YOUNG: AN INDUSTRIAL DISTRICT OF ANCIENT ATHENS



a. Poros Building: N. End from W. Arrows mark NE. and NW. Corners



b. Poros Building: NW. Room from N. (a) N. Wall, (b) W. Wall, (c) E. Wall

RODNEY S. YOUNG: AN INDUSTRIAL DISTRICT OF ANCIENT ATHENS



a. Poros Building from E. Arrow points to N. Wall of Annex



b. Poros Building: N. Wall of Annex from E. (a) Marble-Chip Floor of House of Augustan Period, (b) Annex N. Wall, (c) Earlier Wall



c. Poros Building: Arrow points to Paving Stones N. of Annex Projecting below Foundations of Roman House Wall; (a) E. End of IV Century N. Wall of Annex. View from S



a. Poros Building: Annex from S.: Arrow marks NE. Corner. (a) Earlier (?) Wall in SW. Room of Annex, (b) Drain, (c) S. Wall of Annex



b. Poros Building: E. Wall of Annex from W.



a. Poros Building: Early Wall (a) and Drains (b) in S. Part of Annex, from S.



b. Poros Building: NW. Room from SW. (a) Basin, (b) Pithos used by Marble Workers, (c) Unfinished Well



c. Marble Perfume Bottle



d. Red-Figured Lid



a. House A: NW. Corner from N., showing Doorway in N. Wall



b. Great Drain: looking S. (a) Cutting and Bedding Stones for E. Wall of First Period of House A, (b) E. Jamb of Door in N. Wall



c. NE. Corner of House A, looking down into Drain from E.; Blocks remaining in place of Earlier House, and Bedding for its E. Wall



a. and b. Sherds from under Floor of First Period of House A



c. Sherds with Graffiti from Second Period of House A



d. Looking E. into N. Side of House A. (a) Rectangular Pit of Latest House, (b) N. Doorway, Blocked



e. W. Wall of Drain = E. Wall of House A, Second Period: "Checkerboard" Construction



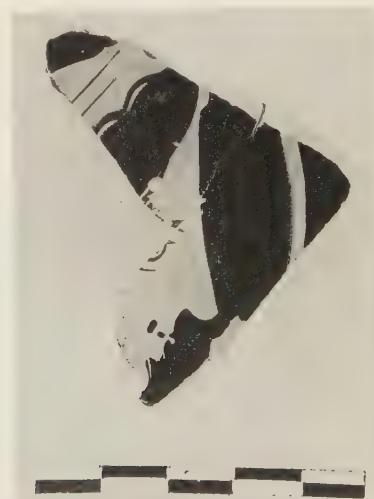
a. Looking SW.: S. Half of E. Wall of House B, showing Limestone Construction and Later Poros Channel Added against its Face



b. Looking S.: W. Drain Wall (a) with Thin Wall (b) added behind it to Correct Angles in Later Phase of House B. Wall across center (c) and Floors at right (d) belong to Roman House T.



c. Fragment of Dikast's Ticket from Rubbish Pit in House B



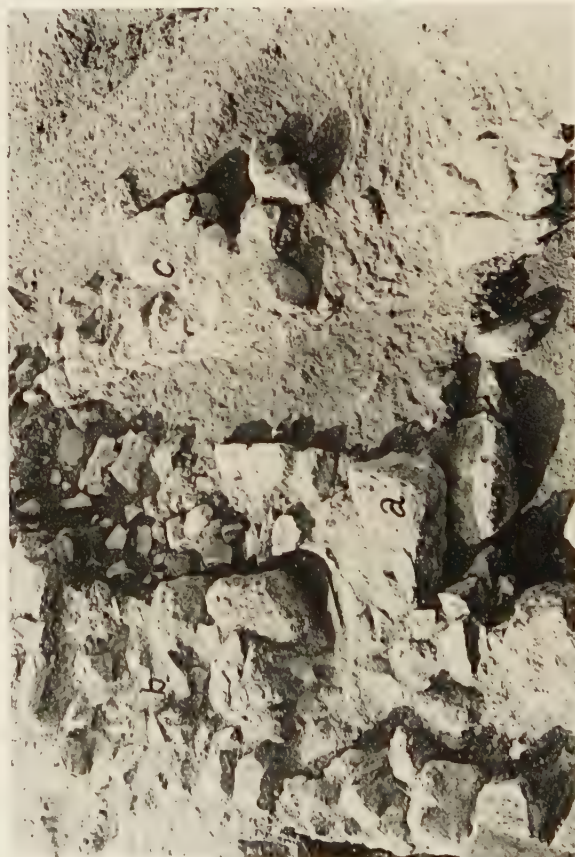
d. Red-Figured Sherd from the Same Pit



a. House C, Room 6: Great Drain (a) with Outside Wall (b) of Earlier House C, beside it. Tile Drains (c) of Room 6 beside N. Wall, (d) of Room 7 at bottom



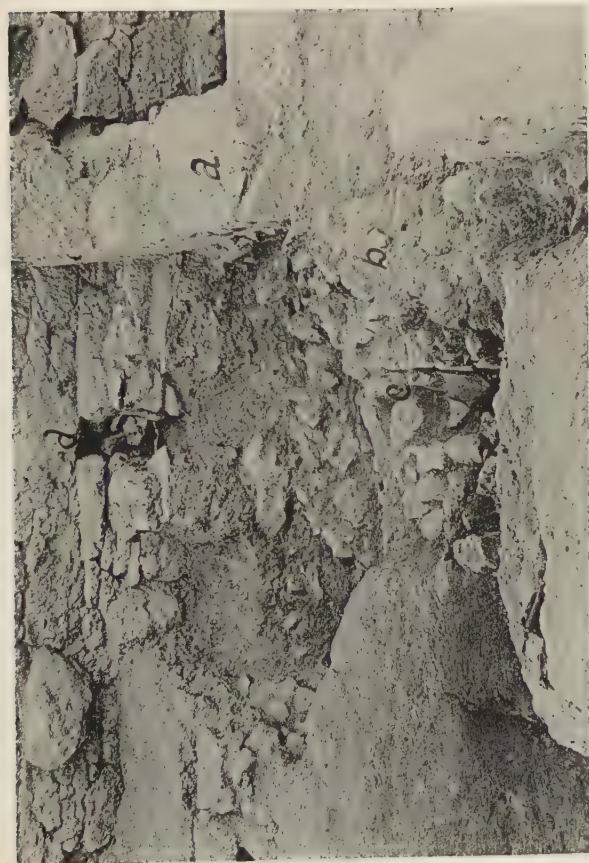
b. House C, NE. Corner, from S.: Outside Wall (b) of Earlier House beside Drain (a) and Various Arrangements of Rooms 4-5



c. Houses C-D, from E.: (a) NE. Corner of Early House C, (b) N. Wall of Later C, (c) South Wall of Second Period of House D



d. House C, W. Wall, from E.: at right Later Floor of Room 12



a. House C, Room 6, looking E.: Later Wall (a) between Rooms 6-7 and beside it Foundation (b) of Earlier Wall, with Tile Drain (c) beside it leading into Drain by Inlet (d) through its W. Wall



b. House C: (a) Wall between Rooms 5-6, looking E., (b) Drain of Room 6 of Earlier House Passing under E. Wall. Note levels indicated by changes in construction of back of Drain Wall (c)



c. House C, from N.: Partition Wall (a) between Rooms 6-7 of Second Period, abutting against Back of Drain Wall (b). Note Hole (c) left in it for House-Drain, and Tile in Place. Left, Inlet (d) into Great Drain



d. House C, Rooms 4-5, from SW.: showing L-Shaped Room 4, with Door (a) to House D or Alley. Note Construction Levels in Back of Drain Wall (extreme right)



a. House C: SW. Corner of L-Shaped Room 4, from E., showing Two Periods of Socle for Wall (a) between Rooms 3-4 and W. Jamb (b) of Door from Room 4 to Court



c. House C: Court in 3rd Period from W. (a) Well, (b) Step-Beddings to Room 3, (c) Wall between Court and Room 11, (d) W. Wall of Court of 1st Period, (e) Doorway from Court to Corridor



b. House C: N. Wall of Court, looking E. Arrow points to Beddings for Steps between Room 3 and Court



d. Looking S. in Great Drain, Projecting Corner of House D, Room 5, with Original Bedding-Stone (a) *in situ*. (b) W. Wall of Drain = Wall of House D, Room 4



a. House D, Room 2, looking S.: (a) Base for Wooden Column, (b) Doorway to Room 6. At left, Edge of Hearth



b. Bronze Dikast's Ticket from House C.



c. Pyre in House C, Room 4, looking E. Level shown is that of the Floor of the 3rd Period, cut through by the Pyre. Note Top of Drain Wall (a) beneath House Wall (b)



1



7



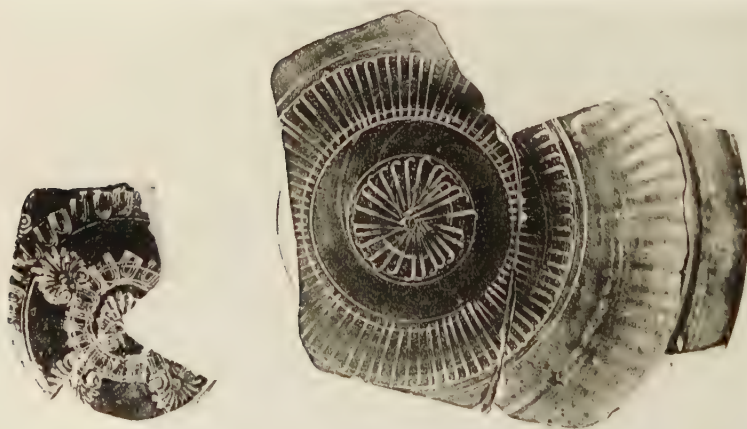
2B



2A



3



4

5



6

Sherds from Filling between Drain and Wall of House C, in front of Room 4
(No. 7 comes from elsewhere in the Agora)



Fragmentary Pottery from Early Pyre in House D



a. Inscribed Lead *Defixio* from House D



b. House F, Later Period, looking N. Left, Vat A; in foreground B; right, C beside Drain Wall



c. House F from S.: in foreground N. End (a) of House E. A, B, C; Vats of Later Period



d. Tank to N. of House F, looking E. Lower left, S. End of Connecting Vat



a. Foundation Blocks (a) under NW. Corner of House K, looking S. (b) Back of E. Wall of Great Drain. (c) N. Wall of House K to left of Squared Foundation and beneath Roman Terrace Wall (d)



b. E. Side of House K, looking S.: left, Wide Shallow Wall Trench (a) in Hillside, turning W. at its S. End. SE. corner of Deep Cutting (b) inside Corner of Outer Bedding



c. House K: Wall and E. Jamb (a) of Door between NE. and SE. Rooms, from S. (b) W. Jamb of Door in N. Wall of House



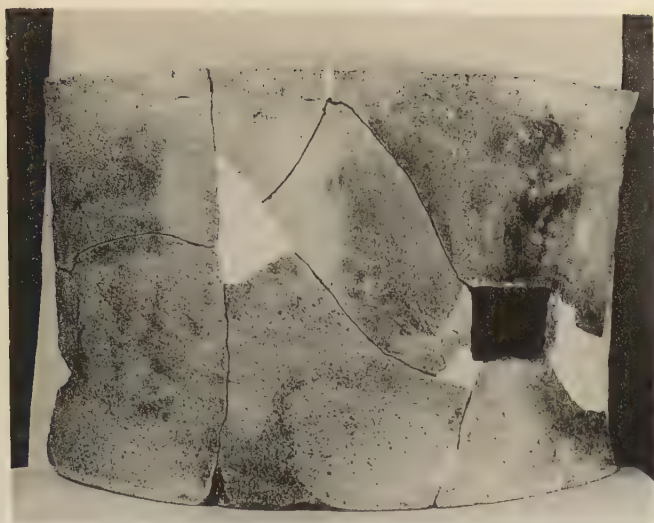
d. House K, looking S.: (a) N. Wall of House, (b) E.-W. Interior Wall



a. House K, looking W.: Two N. Rooms (a and b), right; (c) Walls to retain Marble Chips; (d) Wall of Roman Drain; (e) Drainage Outlet in W. Wall of House K



b. House K, SE. Portion; from S.: Rough Walls (c) built to Retain Marble Chips. Note Jamb (f) of Door between Two E. Rooms and Jamb (g) of Door between Two S. Rooms



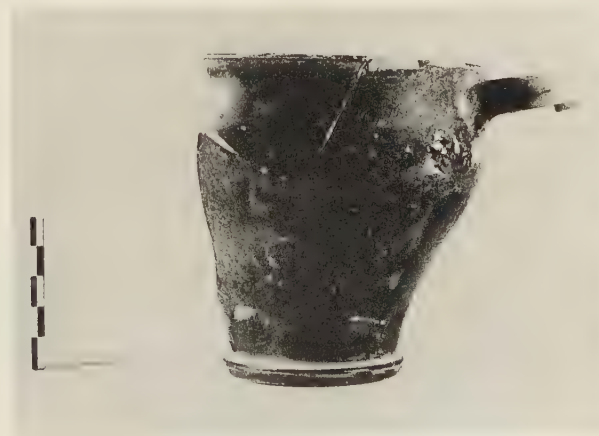
a. Tile from Well in NE. Room of House K



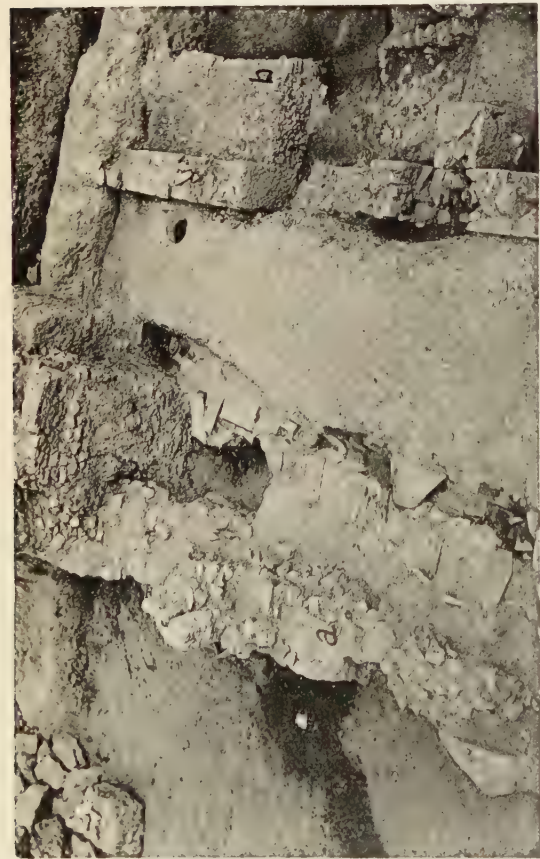
b. Coarse Epinetron from the Well



c-d. Red-Figured Oinochoe from the Well



e-f. Black-Glazed Kantharos and Skyphos from Filling thrown over House K in Latest Period to Raise Levels



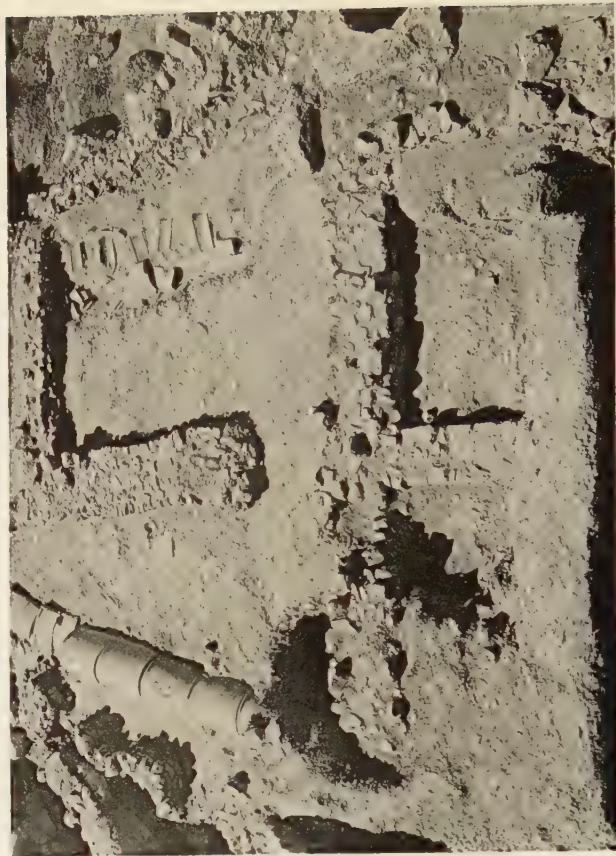
a. House K, N. Side from W.: Tile System beside N. Wall (a); right, Filling of Marble Chips (b)



b. House K: Tiled Basin (c) at W. End of Tile System. View from W



c. House K, N. Rooms: Tile System and Basin (c) at W. End. View from W



d. House K, looking W.: Hellenistic Foundations (d) overlying Classical House, E.-W. Tile Drain (e)



1



2



3



4

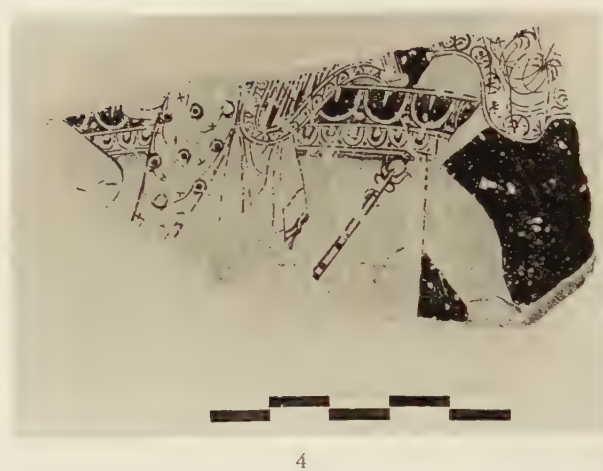


5A



5B

Red-Figured Fragments from Filling between E. Wall of Drain and House L
 RODNEY S. YOUNG: AN INDUSTRIAL DISTRICT OF ANCIENT ATHENS



Red-Figured Fragments from Filling of Deep Drainage Cutting Abandoned when Great Drain was Built
(No. 5 is from elsewhere in the Agora)

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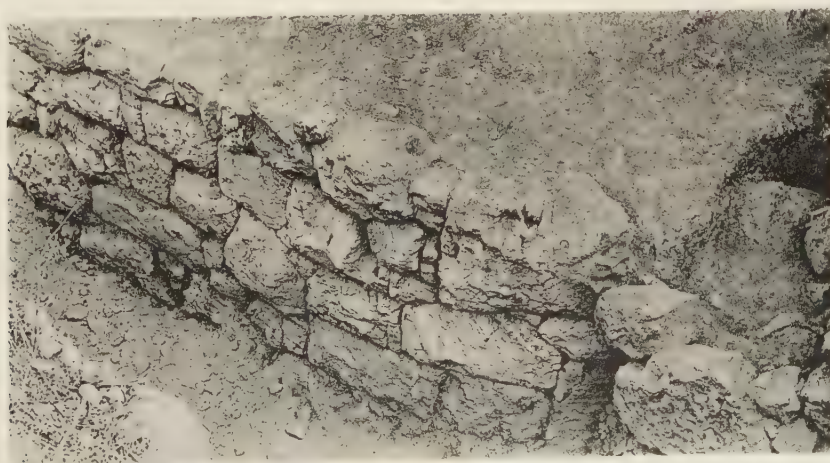
a. W. Wall of Drain in front of House F: "Checkerboard" Masonry, with Cuttings for Beam-Ends of Late Roman Houses



b. The Great Drain, looking N.



c. Limestone Polygonal Construction of W. Drain Wall just S. of Bridge



d. E. Wall of Drain at Entrance of Side-Drain. Crude Dam across Mouth of Side-Drain at right



a. Roman Water Channel at Junction with Post-Sullan and Great Drains, looking NW.: (a) N. Wall of Post-Sullan Drain, (b) Wall of Water Channel carried across Gap on Bridge made by Poros Block, (c) displaced from Post-Sullan Drain Wall



b. Looking S. in Great Drain: Poros Block (c) displaced from Post-Sullan Drain Wall as Bridge for Water Channel; in background Dam across Great Drain formed by S. Wall of Post-Sullan Drain



c. House M: Corner of Wall under Roman Tank and Mended Artisan's Basin beside it



d. House M, Roman Drain (a), Tank (b), Mouth of Built Shaft (c), looking N. Later Terrazzo Floor (d) of House M built over by Walls of Roman Drain (a) and Water Channel (e)



a. Basins and Cement Floor of Workshop of Hellenistic Times S. of Cemetery



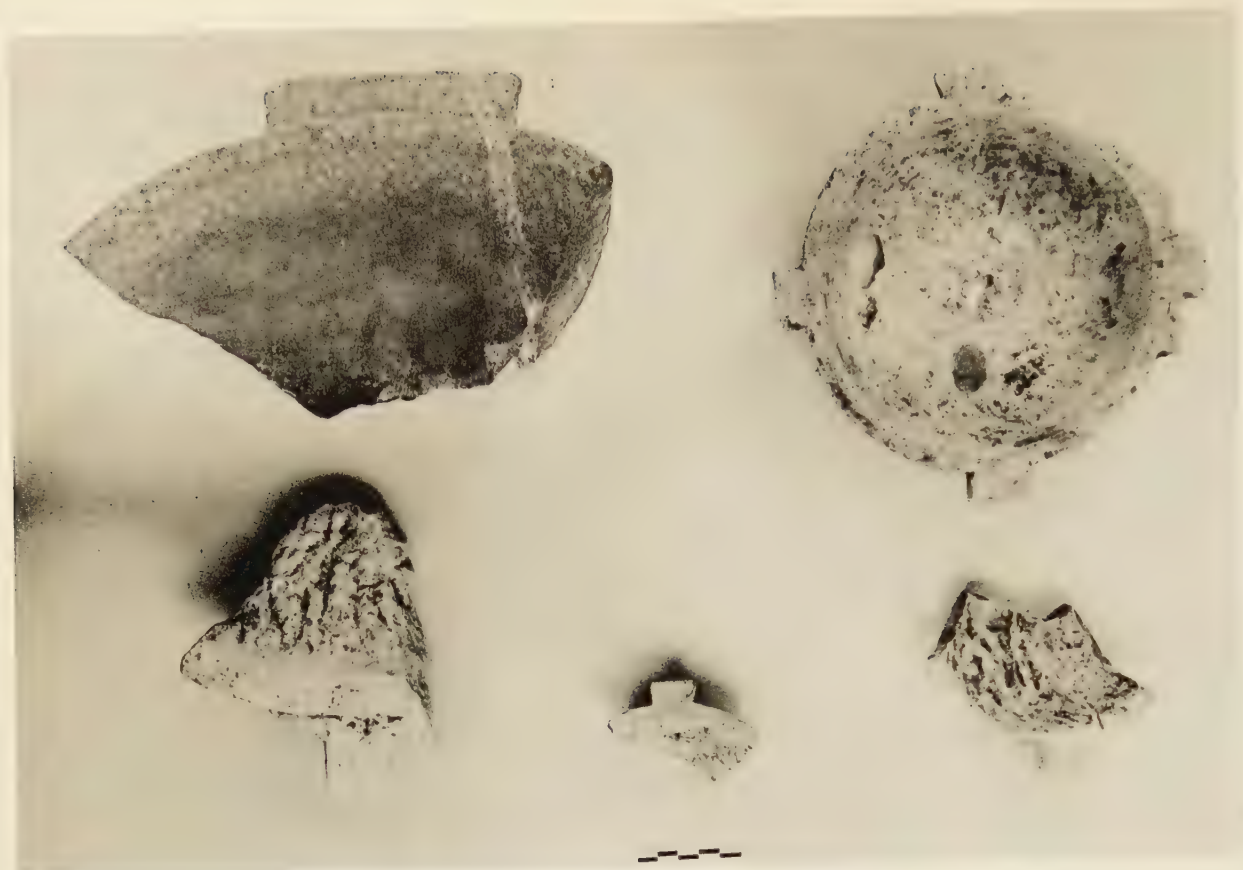
b. Roman Water Tank over House M, showing up-turned Edges of Floor, from S.



c. Area to S. of Archaic Cemetery: Basin of Workshop and Urn containing Skeleton of Dog



d-e. Stamnos and Unguentarium from Dog's Burial



a. Fragments of Unfinished Stone Basins from Roman Well Beside Post-Sullan Drain



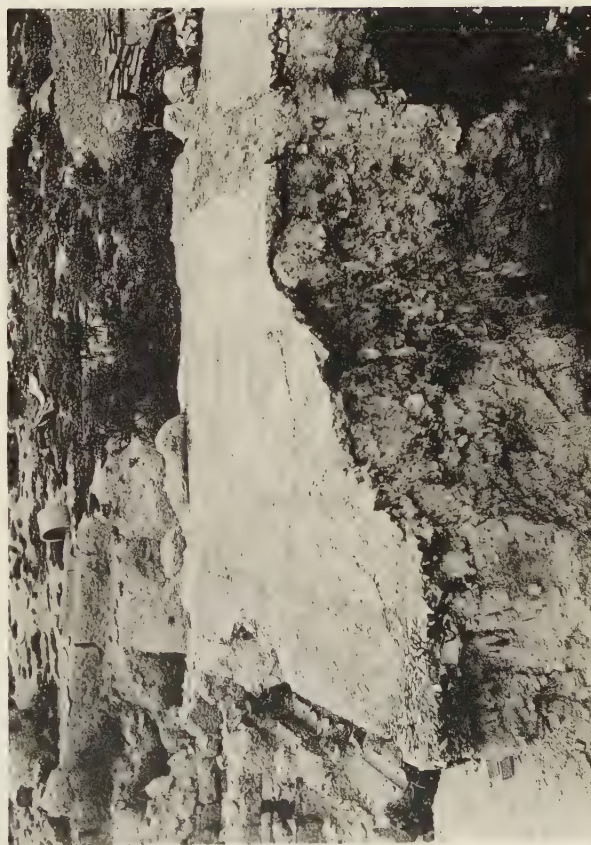
b. Sculptors' Waste from IV Century Workshops:
Unfinished Hand and Herm Arms



c. Emery Grinders found among Marble Work-Chips in
Area of Poros Building



a. Mosaic Floor in House S



b. Mosaic Floors in House T



c. West Bath: from S., showing Furnace and Hypocausts still *in situ* in the Caldarium



A

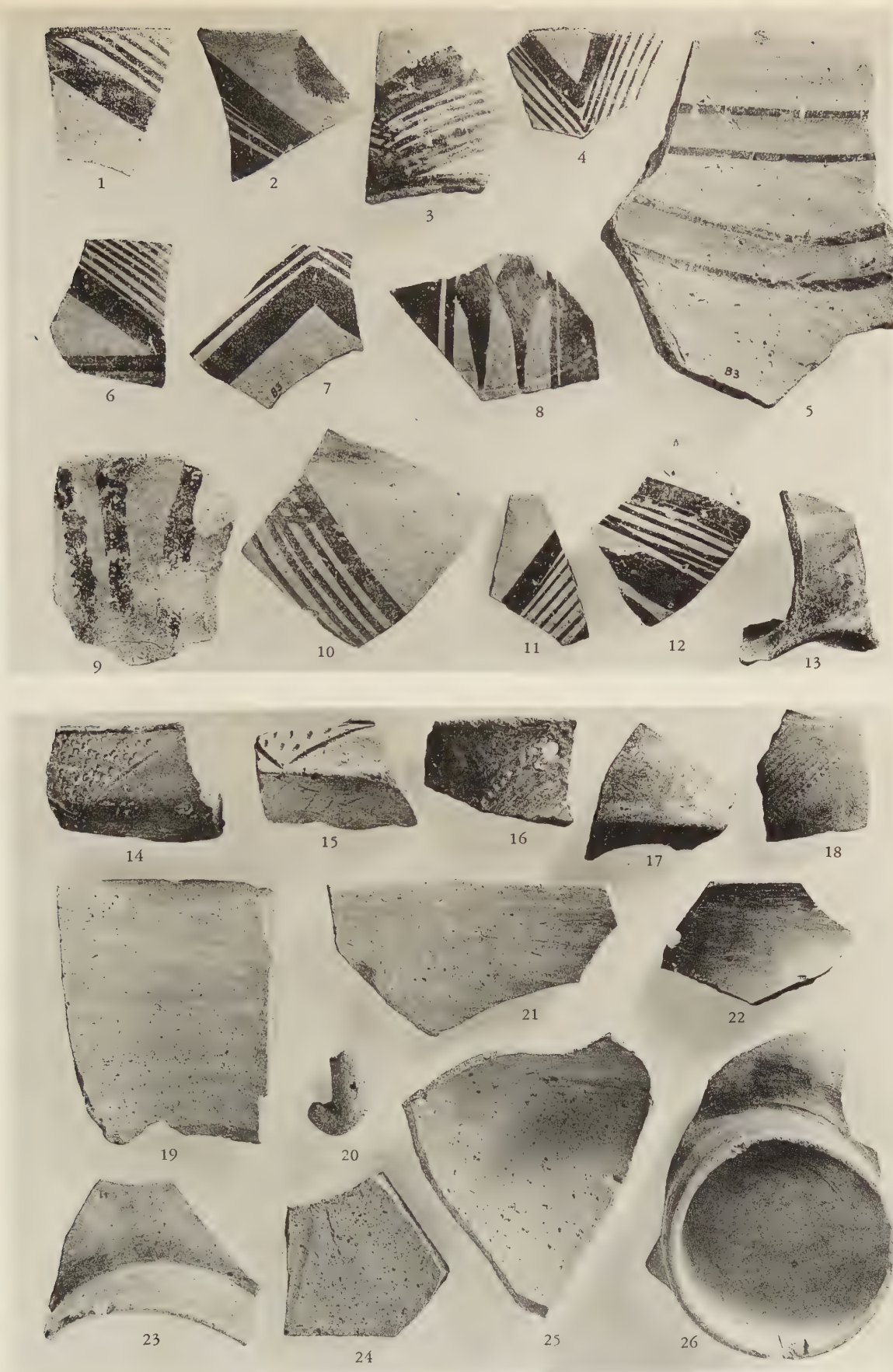


B



C

Neolithic Sherd from Site near Thespiiai. A, Exterior; B, Interior; C, Profile (Drawn by Miss Marion Welker). Full size



Fragments of Neolithic Pottery from Site near Thespias. Scale 1:2

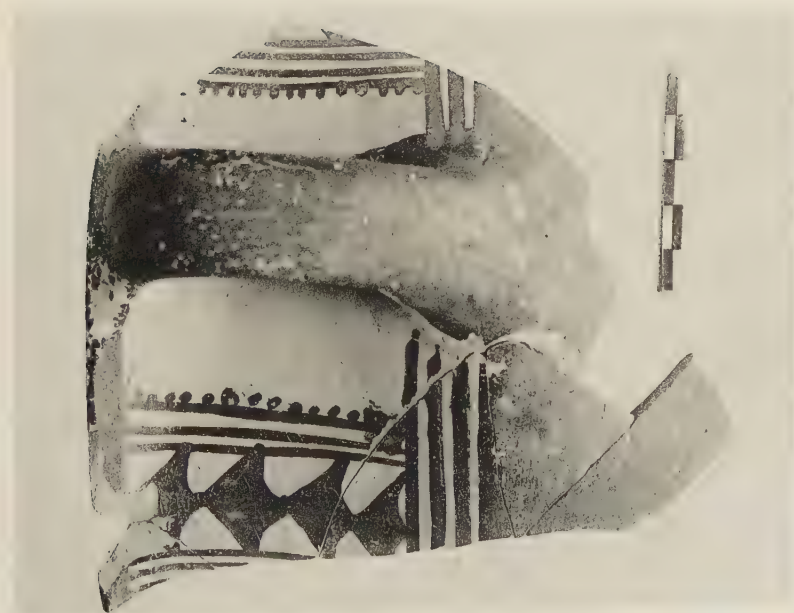
JOHN L. CASKEY: NEOLITHIC SHERDS FROM THESPIAS



a. Latrine behind Shop XXVII of the South Stoa



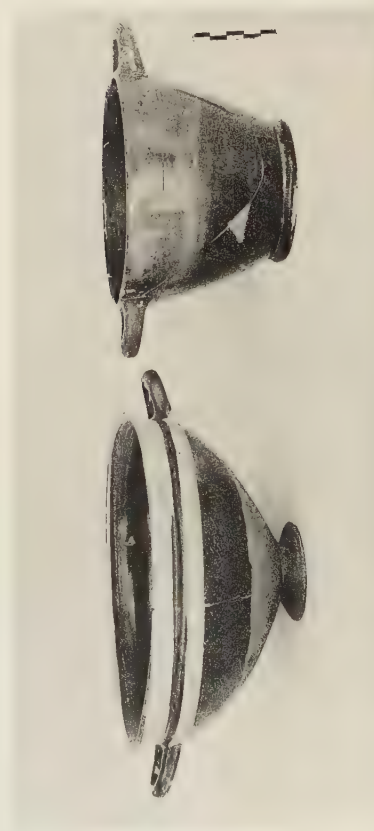
b. Late Roman Wall West of the Bouleuterion



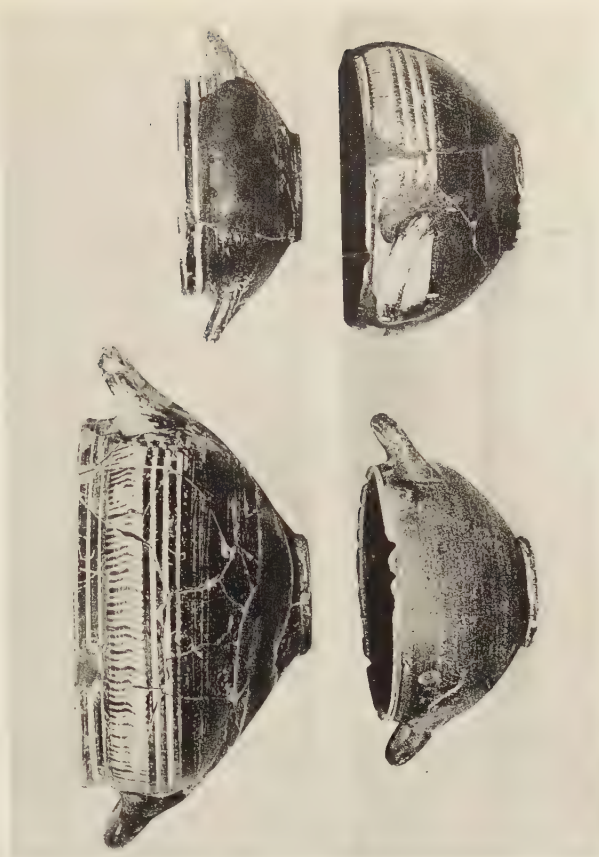
a. Fragment of Late Mycenaean Krater



b. Submycenaean and Protogeometric Shards



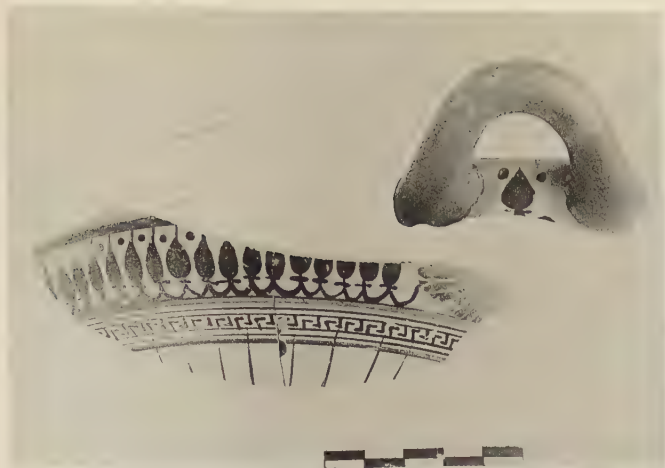
c. Two Attic Vases from Well in South Stoa



d. Vases from Geometric Well



Siana Cup from Well in South Stoa



a. Fragments of Laconian Cup



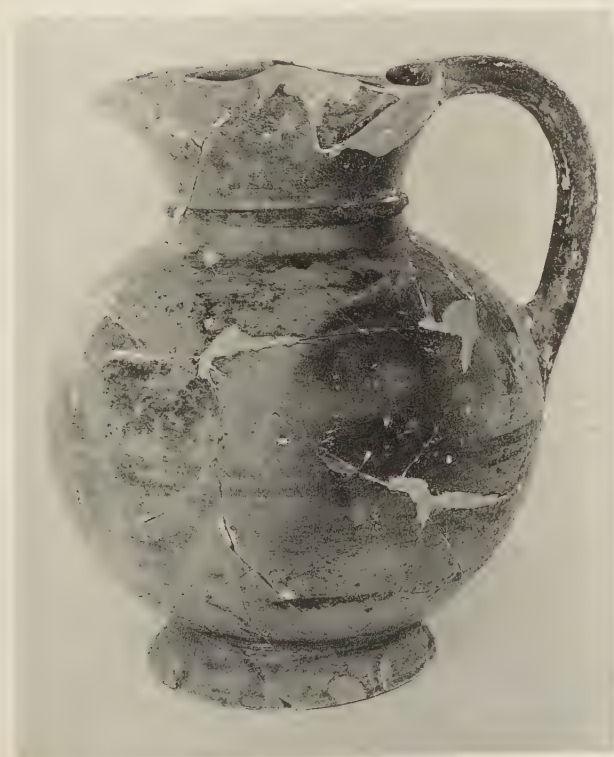
b. Corinthian Kotylai



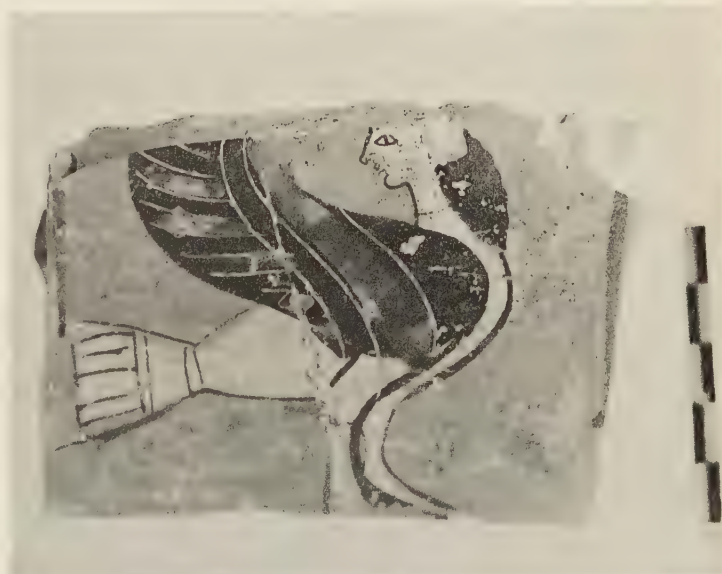
c. Two Corinthian Kotylai



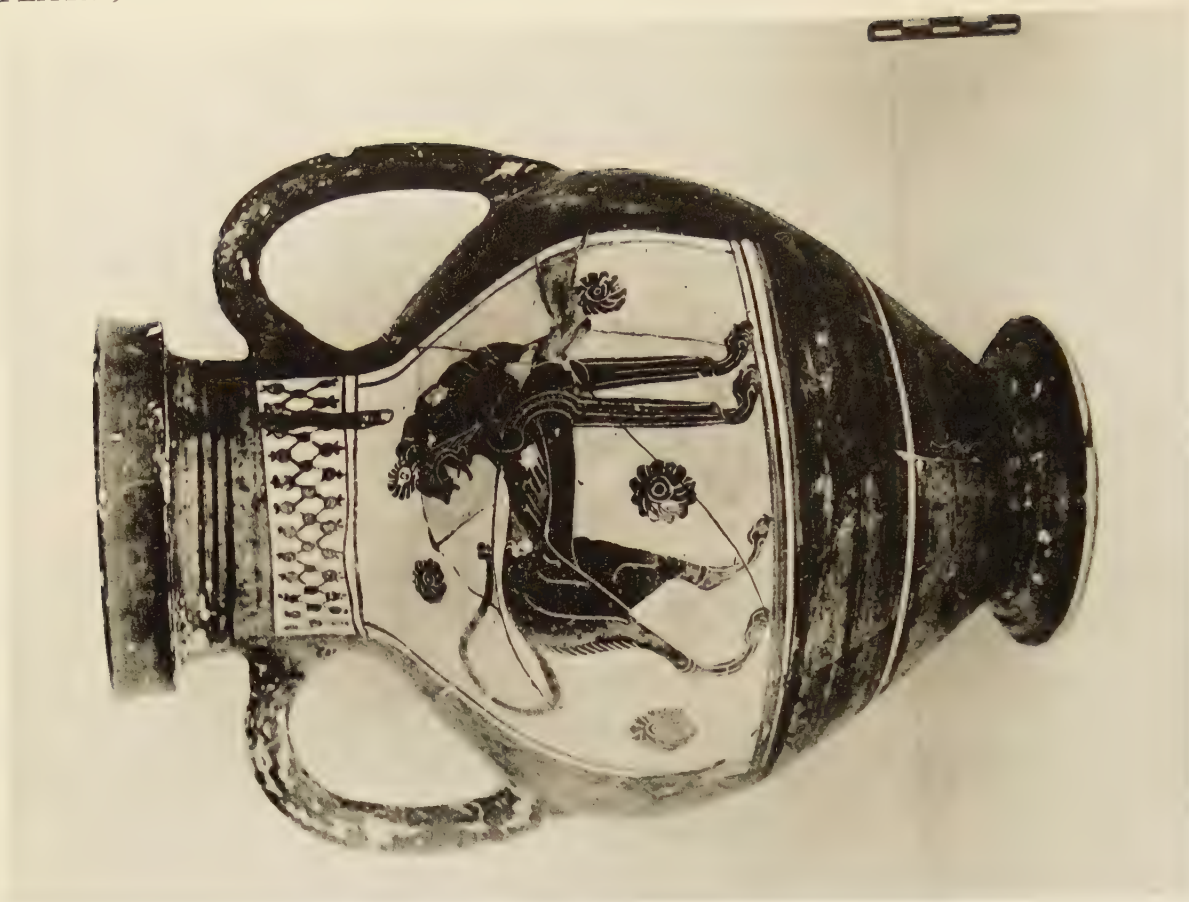
d. Two Corinthian Vases from Well



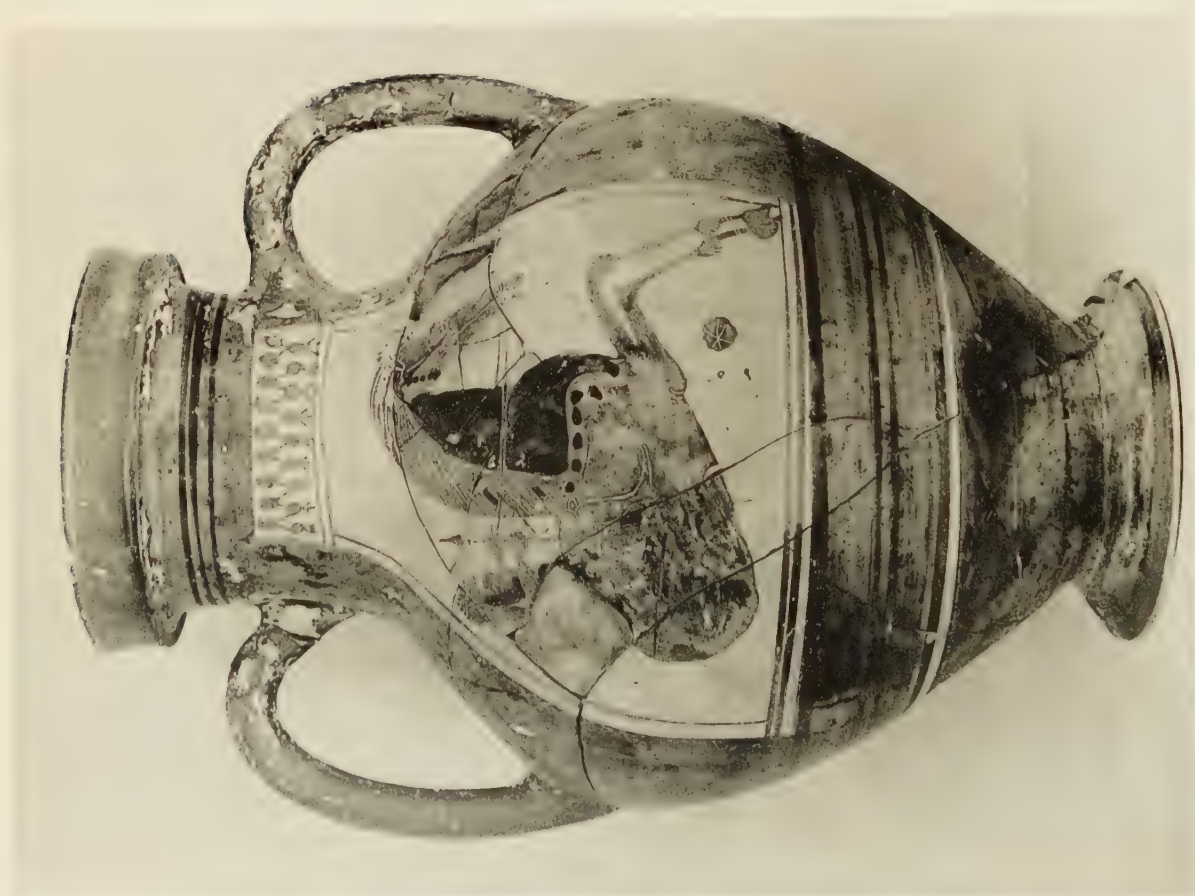
e. Oinochoe from Well



f. Handle Plaque of Column Krater



Amphora from Well in South Stoa



OSCAR BRONEER: INVESTIGATIONS AT CORINTH, 1950



a. Two Large Pitchers from Well



b. Lamps from Well



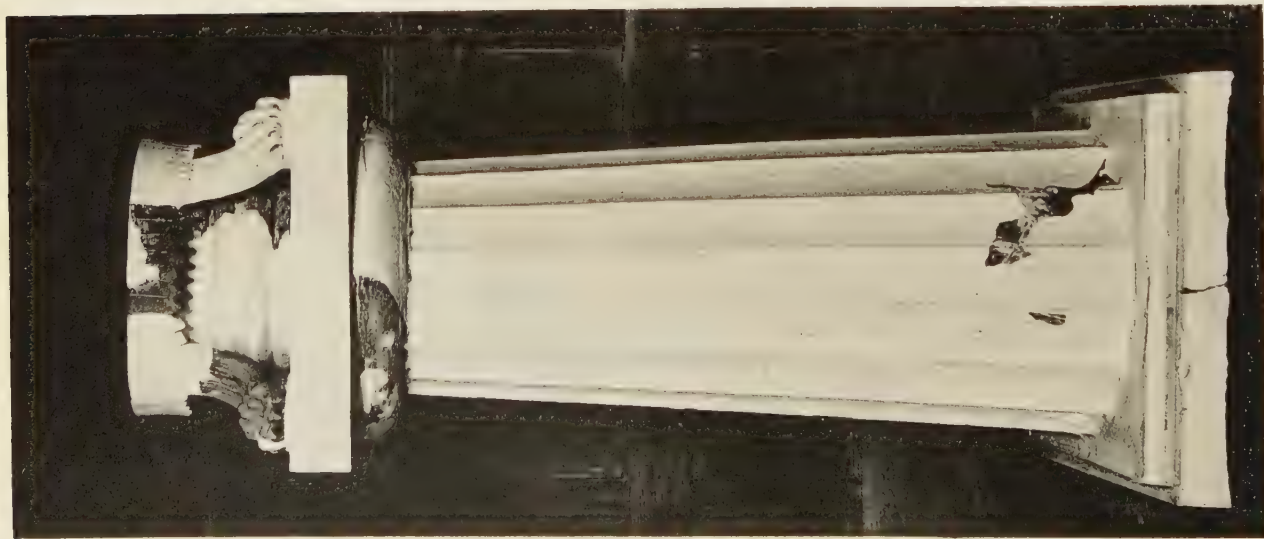
c. Fourth Century Vases from Well



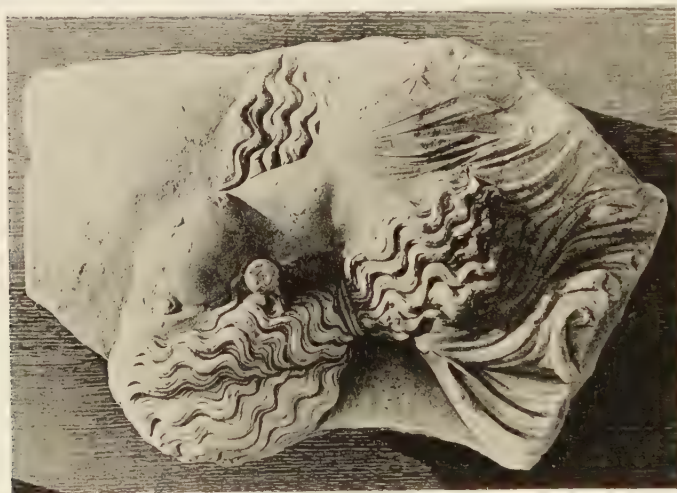
d. Fourth Century Vases from Well



e. Fragments of Column Krater from Stoa Deposit



a. Restored Terracotta Stand from Stoa Deposit



b. Relief of Dancing Maenad



c. Dancing Maenad in Madrid
(From *Berlin Winkelmansprog.* I, plate II)

AMULETS CHIEFLY IN THE BRITISH MUSEUM

A SUPPLEMENTARY ARTICLE

(PLATES 96-100)

L'archéologie, si elle est privée du secours de la philologie, devient une science conjecturale, dont les conclusions n'atteignent que le degré de vraisemblance que peut leur prêter l'ingéniosité et l'éloquence de leurs auteurs.—FRANZ CUMONT.

WHEN one ventures to ask the attention of scholars to a long article on magical amulets shortly after publishing a book on the subject, a word of explanation seems to be in order. Much of that book (*Studies in Magical Amulets*)¹ was based upon observations made when I had the opportunity to examine the unrivaled collection of magical gems in the British Museum, but only a few illustrations of them could be offered in the finished work. This was because, unfortunately as it turned out, I deferred asking for the necessary casts until I was ready to proceed with the actual writing of the *Studies*. By that time the war was in progress, and the treasures of the Museum were not available for the use of students until sometime after it ended. In the meantime I had been obliged to proceed with the printing of the material at hand.

Now, through the courtesy of the Museum, I have obtained a number of excellent casts. They were made from some of the most interesting amulets in the collection, and would be worth publishing even without regard to their affiliations. Several of them, however, afford the means of supplementing or correcting the account of them, and of certain kindred types, which I gave from hurried notes made in 1935 and 1937; others of considerable importance could not be mentioned in my book because of the incompleteness of my notes. Meanwhile several interesting photographs and casts have been generously placed at my disposal by the curators of other foreign collections, and by private owners.²

¹ *Studies in Magical Amulets, chiefly Graeco-Egyptian*. Ann Arbor, University of Michigan Press: London, Geoffrey Cumberlege, Oxford University Press. 1950. In this article the abbreviation *SMA* is generally used in referring to the book. I take advantage of the supplementary purpose of this paper to excuse my use of various other abbreviations and short titles. They are mostly familiar, and all can be found in the Partial Bibliography of *SMA*, pp. xix-xxiv.

² In the course of preparing this study I have incurred many obligations, which it is a pleasure to acknowledge here. In the first place, for permission to publish the majority of these

In the latter part of this article all these objects are catalogued and arranged in much the same manner as that adopted for the list on pp. 253-323 of *Studies in Magical Amulets*, and illustrations will be found on the accompanying plates. Where it is possible to contribute anything towards the interpretation of the amulets, or to indicate their relations to previously published specimens, comments, usually brief, are added to the descriptions in the Catalogue. I trust that no apology is needed for the numerous references to passages in *Studies in Magical Amulets* where these or similar pieces have been discussed. They will make it unnecessary to repeat arguments used and authorities cited in the larger work.

After some hesitation I have decided to include in the Catalogue descriptions of several gems that were brought to my attention by dealers who sent me impressions of them at various times during the last twenty years. Their present location is unknown to me, and I have no means of tracing the owners and requesting permission to publish, as would ordinarily be not only proper but obligatory. I hope that the interest of the objects to the expert will excuse the breach of the usual custom.

Here I should mention the fact that several pieces that are published for convenience along with the magical stones do not show any signs of magical purpose; they could be regarded simply as tokens of the wearer's devotion to the divinities represented upon them. The distinction between stones worn in the hope of securing divine protection for oneself, and others which invoke or seek to control demonic powers, is not always clear. The technique of the religious amulets, as they may be called, is much the same as that of the undoubtedly magical pieces, and they belong to the same period. A magical word or even a magical character would be enough to transfer a stone from the one category to the other (see *SMA*, pp. 5-7, 43, 45).

A few words of explanation about the descriptions and the plates will not be out of place. Amulets were not meant to be used as seals, and, with rare exceptions, their designs were intended to be viewed directly, not by means of impressions. For this reason the illustrations have been made from casts (positive) when they could be obtained, not from impressions; and when only impressions were available, the photo-

objects, I am deeply indebted to the Director and Trustees of the British Museum, to Mr. Alec B. Tonnochy, Keeper of the British and Mediaeval Antiquities, and to Mr. Bernard Ashmole, Keeper of the Greek and Roman Antiquities, who has been most helpful. A word of appreciation is also due to the technical assistants who made the casts. Mr. and Mrs. Frederick Zimmermann of New York graciously allowed me to examine and publish seven pieces in their possession (Nos. 74-80). For similar favors I am grateful to M. Henri Seyrig (72-73), M. O. Guéraud (16), Prof. G. H. Chase (58), M. J. Babelon (56, 60), Prof. Fritz Eichler (63), Mr. C. D. Bicknell, Lewis Curator (65), M. G. Fabre (66), M. J. Charbonneaux (67), Father R. Mouterde (81). Prof. Charles Seltman, on this as other occasions, has given valuable help. Prof. H. C. Youtie contributed a reading in No. 51.

The casts of the stones owned by Mr. and Mrs. Zimmermann are the work of Dr. Louise Shier. The photographs were made by the studio connected with the Institute of Engineering Research, University of Michigan, and by the recently established Photographic Services of the University.

graphic films were reversed in printing in order to show designs and inscriptions in their proper relation to the spectator. In some instances, when a modern imitator has overlooked this characteristic of ancient amulets, and has cut a stone as for a seal, I have reproduced the appearance of the impression. The words right and left are used from the spectator's point of view except in mentioning the physical parts of a figure in the design, as the hand or the shoulder of a divinity. "Upright oval" means that the axis of the *obverse* design is in the longer dimension, "transverse oval" that it is in the shorter dimension. No account is taken of the reverse, where opposite conditions are common. Measurements are given in millimeters.

An unexpected result of the study bestowed upon the material from the British Museum is set forth in the pages that immediately follow this paragraph. They deal with Nos. 58-71 in the Catalogue, and would have been introduced just before that group were it not inconvenient to divide the Catalogue into two parts. Attentive observation of these pieces showed that their designs were not simply independent variations upon common subjects—like, for example, the numerous Harpocrates and Chnoubis amulets—but that there were among them either ancient replicas or else, certainly in some instances, modern copies of ancient originals. Others, again, are fabrications merely suggested by an ancient pattern, not copied from it, or are founded upon nothing better than a forger's notion of what a "Gnostic" amulet should look like. I trust that my conclusions about these objects are stated with due caution, because, to say nothing of the possibility that others may hold different opinions, it is not easy to determine the exact relations of two or more similar pieces to one another without bringing them all together for minute inspection, and that is rarely practicable. I should particularly deprecate any reflections upon the scholarship of outstanding authorities who have accepted some of these stones as genuine. Errors of judgment are quite excusable in a division of archaeology to which comparatively little expert talent has been devoted.

ANCIENT REPLICAS AND MODERN IMITATIONS

Many years ago Furtwängler called attention to the fact that certain glyptic designs have been carried out in two or more replicas, the work of the same artist (*Antike Gemmen*, III, pp. 92-93, 443-444). In some instances one piece cannot be distinguished from the other by any detail of the gem-cutter's work, in others there are insignificant variations. A good example of such doublets falls within the period in which most of our magical gems were made, and may serve to introduce this division of the present study.

A. The Museum of Fine Arts in Boston possesses a sard with a representation of the story of Jonah (No. 03. 1008). This gem was described and illustrated in an article in the *Harvard Theological Review*, 41 (1948), pp. 32-33, with fig. 1; a brief

description and illustration appear also in *SMA*, p. 312, and Pl. 19, 347. There is therefore no need to discuss its details here. The article just mentioned came to the attention of Mr. Bernard Ashmole, Keeper of the Greek and Roman Antiquities in the British Museum, and led him to take note of a strange coincidence. In a letter of June 14, 1949, he informed me that a visitor had recently brought into his department an exact replica of the Boston stone. Mr. Ashmole did not record the material of this replica, but took a good sealingwax impression of it, which he very kindly turned over to me. Comparison of this impression with the Boston sard shows that the designs are indeed identical. Mr. Ashmole had no doubt of the genuineness of the stone shown to him, and the antiquity of the Boston gem has never been called in question. The two pieces are shown together (Nos. 58-59), and a brief description of the design follows in the Catalogue which forms a part of this article.

B. The situation is very different in the next group of objects (Nos. 60-62), of which the first is a large red jasper in the Cabinet des Médailles (No. 2221 in Chabouillet's Catalogue). There is nothing suspicious about the design, a man dressed in kilted tunic of the military type, and shod with boots, standing with a serpent in each hand. Egyptian gods are frequently shown holding serpents, and in the imperial period are sometimes clothed as Roman warriors. The trophy fixed upon the head is unusual; yet Egyptian deities are often marked by symbols so attached—e. g., the scorpion of Serqet and the fish of Ḥatmehit—and there is no reason why the trophy, taken over from the Greeks and Romans as a symbol of victory, should not be so used (cf. *SMA*, pp. 244-245, Pl. 21, 374-376). I have not seen the reverse of the stone, which contains in four lines arrangements of the seven vowels.

There is little doubt that it is this stone, then in the possession of Thomas Le Cointe, which is illustrated in Chiflet's *Abraxas Proteus*, pl. 23, No. 94.³ In a few minute details Chiflet's engraving is untrue to the original. The snakes held by the man are straighter, and the trophy on his head, which, in the original, is very slightly inclined from the vertical, is here tilted farther and looks as if it might topple from his head. There are also inaccuracies in the inscription, some of which, such as the confusion of alpha, delta, and lambda, prove nothing, but others are important. On the side toward which the man is looking, the word nearest the margin begins with a letter (damaged by a slight grinding down of the margin) which is almost certainly ρ ; the engraver has omitted it entirely. Similarly, on the other side of the stone, he has omitted the ν which begins the middle line and the δ which begins the outside one. Another minute detail is of some importance in connection with other gem inscriptions as well as in this instance. The original engraver used clearly marked but not exaggerated serifs at the tops and bottoms of several letters. Chiflet's

³ This work follows the essay of J. Macarius (L'Heureux), *Abraxas seu Apistopistus*, in a volume published at Antwerp in 1657.

engraver has so overdone these serifs that the letters α , δ , λ , are topped by a conspicuously long horizontal stroke for which there seems to be no precedent in ancient epigraphy.

Observation of these details enables one to state with some confidence that two other stones bearing the same design as the Paris stone are modern copies based upon the engraving in Chiflet or the reproduction of it in Montfaucon (*L'Antiquité expliquée*, II, 2, pl. 160, 4). The first of these is B. M. 56026 (No. 61). Here the stone shows the same inaccuracies as those noted in Chiflet's engraving; but the maker of 56026 has added errors of his own. He has omitted the first four letters of the word $\eta\chi\omega\delta\omicron\mu\alpha\rho\nu\nu\omicron$ (middle line at the left), perhaps because they resemble the last four of the preceding line; and he has written a reversed N in this line and one in the following. He has also followed Chiflet's engraver in placing the long horizontal stroke over the triangular letters, and in one or two places it is as long as the base of the letter. Other minutiae, not worth discussing here, but significant to a close observer, strengthen the conviction that the work is not ancient.

This same design is used for the reverse of another stone in the British Museum, 56360 (No. 62), and the marks of Chiflet's engraver are again present, some of them exaggerated. The snakes are even straighter, the angle of the trophy to the vertical is still greater, the horizontal stroke across the tops of the triangular letters is still longer in some instances. Several glaring errors occur in the inscription on the right hand side of the stone. The design is again a modern fabrication based on the old engraving.

The obverse design also is somehow related to an engraving in Chiflet (pl. 19, No. 78) or to its original; but the British Museum stone cannot be identified with that original because Chiflet's gem has a different reverse. There is also a difference in the obverse design, to which attention will be called later, but with that one exception, the slight differences that are perceptible may be due to the engraver. The central figure of this obverse design is bearded, has his arms folded on his breast, and wears a crown with triangular points, which is of a mediaeval rather than an ancient type. The lower part of the body is so closely swathed as to give the appearance of a herm. From his elbows two curved lines descend to the heads of the two outermost of four nude figures which form a group directly under the feet of the royal person. They face a central axis, have their arms crossed upon their breasts, and seem to be dancing on a segment of a celestial sphere, indicated by two concentric arcs connected by slanting lines, and with three stars in the spaces between. The other details, including a meaningless inscription, contribute nothing of importance.

In Chiflet's illustration, wings are attached to the backs of the two outermost dancers; in the B. M. stone they are absent and in the illustration they were probably added by the draftsman who supplied the copy for the engraver. So far as I know, the design as a whole is quite without parallel in ancient glyptic art, and it seems to me

to be a modern fabrication. It probably represents some Renaissance scholar's conception of a Gnostic "universal father" with a group of cosmic spirits dancing on the celestial sphere.

C. Another cut of Chiflet's (pl. 17, No. 19) plays a part in the treatment of the next two objects. The first of these is a chalcedony in the Kunsthistorisches Museum at Vienna (No. 63). In Chiflet's time it was in the cabinet of the Archduke Leopold Wilhelm. The stone is an oval lentoid, with sharp edge, 22 x 19 x 6.4. On the obverse, at the top, is an ouroboros enclosing seven characters, of which five, including two forms of epsilon (Ε and Ε), are Greek letters. At each side are two characters of the "ring sign" class; but the eight points of the crossing diameters end in short strokes at right angles to the lines, not, as usual, in small circles. Below is a long inscription, of which the first nine lines contain a number of well-known *voces magicae*, several of them in corrupt forms, then the words *φυλάξετε Μαίανω*. The Latin name Maianus is not common, but is adequately attested. As for the use of the dative, it is uncertain whether we should regard it as *dativus commodi*, as in Thuc. 7, 53, or as a mere blunder for the accusative. Among the magical words we recognize more or less corrupt versions of *Iao Sabaoth Adonai*, *semeseilam*, *abrasax*, *akram-machamari*, *sesengenbarpharanges*, *arouanta*, *Michael*, *amorachthi*, and in lines 6-7 what is probably a careless copy of *ōrthmenchinambōn*, a word that I have seen elsewhere only in connection with scorpion amulets (*SMA*, pp. 77, 200, 273).

The reverse is covered with an entirely meaningless inscription, the elements of which do not even make a recognizable magical word, with the single exception of *Iao*; and the greater part of it consists of mere combinations of the vowels in threes. Thus the potency of the inscription consisted solely in the fact that it was made up of letters in groups of three and was unintelligible (see *SMA*, pp. 193-194). After the first line the writing is divided into three columns, which, from line 3 on, consist of three letters each, with vowels greatly preponderating.

Chiflet's draftsman made his drawing almost three times the size of the original, and it is inaccurate in several details. The ring signs at the top of the obverse are reduced to mere asterisks, and the head of the ouroboros, indistinct in the original, is brought out clearly and given a kind of forward-cocking crest, which I cannot detect on the photograph of the original. There are also several errors of reading, especially on the reverse, where the engraver has further erred in barely indicating the division of the inscription into three columns, which is so conspicuous on the original.

There is reason to think that at least three stones were cut with Chiflet's engraving as pattern; King, at any rate (*Gnostics*, pp. 289-290), had seen three with the same inscription except for the apparently inevitable errors. One of them is probably our No. 64, a sard in the British Museum (56276) of about the same size as the Vienna chalcedony. If it is the same as a stone mentioned by King (p. 290), it came from the Towneley collection, but the Museum now has no record of its provenance.

On the obverse the maker has followed Chiflet's draftsman in reducing the four ring signs to asterisks and in making the head of the ouroboros clear. He has also followed Chiflet's errors in the inscription (e. g. CCCЄ at the end of line 4, XЄ line 9), and introduced several more of his own. He has departed from the proper division of the lines, and at the end he has omitted the prayer *φυλάξετε Μαιανῶ* for lack of room.

On the reverse matters are even worse. Chiflet's errors are copied, (e. g. MAῶ for HAῶ in line 4, ЄMH for ЄῶH line 12), others of his own are numerous, and the whole epigraphic style breaks down in the latter half of the inscription, where we find impossible forms like a Latin L, a thin broken-backed epsilon, and other such monstrosities. If anything further were needed to establish the spurious character of the stone it would be at hand in the circumstance that this forger took the trouble to cut the long inscriptions retrograde, ignorant of the fact that both designs and inscriptions on genuine magical gems are almost always cut to be read by direct view, not from an impression. Retrograde inscriptions of a single word sometimes occur on ancient amulets; but I know of no long inscriptions so treated.

The tests that prove the British Museum stone to be derived from Chiflet's engraving may be applied with a like result to an amulet published in the *Catalogue of the Wyndham Cook Collection* (p. 58, No. 264). The maker used a stone of a different shape, and perhaps for that reason omitted the ouroboros and asterisks at the top. The inscription is better executed than that of No. 64, and in that respect follows the Chiflet cut more faithfully, though not without errors. Since the above-mentioned publication is adequate, there is no need to describe the piece or to comment upon its details.

It is scarcely necessary to emphasize the importance of the part that Chiflet's engravings played when they came into the hands of forgers of the late seventeenth and eighteenth centuries. The making of spurious "Gnostic" gems had begun before, as Chiflet's own plates show, for it is impossible to believe that some of the objects that he illustrates are ancient. But the convenience of his cuts for the imitator's purpose is obvious. We have seen it in this group and the preceding one (B), and shall find it at work again in Group E. To these descendants of Chiflet's engravings we should add two more which I have discussed elsewhere (*SMA*, p. 147, p. 290, No. 221; p. 281, No. 173).

D. The next group (Nos. 65-68) is rather puzzling. If all four pieces could be set side by side on a table, it might be possible to determine their relations to one another definitely; but when one uses only casts, impressions and photographs, some points must remain in doubt. Yet it is certain that all the members of the group are directly or indirectly the product of one maker. The design common to all of them is best represented by a stone in the Lewis Collection at Corpus Christi College, Cambridge (No. 65. It is No. C 17 in J. H. Middleton's *Catalogue*). Middleton says that

Mr. Lewis bought the stone from M. Feuardent, who obtained it in Bombay. It is a red jasper scaraboid, very convex on one side, which we treat as the obverse, flat on the other. The obverse design is the cock-headed anguipede, noteworthy in this instance for the slender, elongated proportions of the human trunk. In the field and round the margin are many letters, mostly vowels, making no sense. Other details will be noted in the Catalogue.

The center of the reverse is occupied by the lion-headed Chnoubis serpent, radiate as usual. His body makes a double coil at the middle of the field and then descends in an almost straight line. Round him are the triads of animals which are commonly placed round Harpocrates, as if adoring the young sun god, scarabaei above, goats and crocodiles at right, birds and snakes at left. At either side of Chnoubis are two meaningless letters.

There are unusual features about the designs of both sides. Taken singly they carry little weight, but taken together and in connection with the existence of approximate replicas, they arouse some suspicion. In the first place, the obverse is cut as for a seal, and so the anguipede carries his shield on his right arm. This is rare on magical amulets. Yet the reverse design is cut for direct view. This is proved by the fact that the goats are on the right side, as in all genuine amulets that show the animal triads (See *SMA*, Pl. 10, 203-208; 210 is exceptional because there for artistic reasons the maker has broken up the triads. See also *Southesk Catalogue*, N 24, remembering that all Lord Southesk's cuts are made from impressions).

The substitution of Chnoubis for Harpocrates is not inappropriate, since both are solar figures (*SMA*, p. 142), and yet I believe it to be without parallel except in this group. There are also a few details of the design that are faulty. The legs of the crocodiles, instead of bending naturally, are set like short straight pegs under the middle of the body. The birds, which should be hawks, seem to be pigeons, though they might even be taken for ducks;⁴ and the snakes have quite unnatural mouths and odd-looking crests. This last point applies also to the snakes that serve as the legs of the cock-headed god on the obverse.

There is a close replica of the Lewis stone, another red jasper, in the Cabinet des Médailles of the Bibliothèque Nationale (2198 bis, our No. 66; Babelon, *Guide*, pp. 70-71; not in Chabouillet's catalogue of 1858). It gives the anguipede the same disproportionately long body that was noted on the Lewis stone. The casts of this latter seem to be slightly smaller than the impressions (I have no positive casts) of the Paris specimen; but this may be an unavoidable consequence of the process used in making the reproductions. The only difference that can be readily perceived is in the M behind the anguipede's whip arm; on the Paris stone it is set a little higher with

⁴ They have also been taken for peacocks (De Ridder, *Cat. sommaire des bijoux antiques*, No. 1616).

reference to the elbow, and the letter itself is a little larger. The Paris jasper has an A clearly cut on the shield, where the Lewis stone has what looks like V; but it is really part of an A, the left hand stroke of which was too lightly incised or else has been worn away. On the Paris stone the lines of letters just below the arms of the god have been erased, or else so abraded by wear that only faint traces are visible. Before leaving these two objects attention may be called to the fact that red jasper is rarely used for Chnoubis amulets, and is not commonly used for the cock-headed demon, though examples occur. For the Chnoubis design chalcedony, plasma, and black jasper are often employed; for the anguipede dark green jasper and haematite predominate.

The two remaining members of this group are made of bronze, one in the Louvre (Bijoux 1616, our No. 67), the other in the British Museum (56550, our No. 68). I have suggested elsewhere (*AJA*, 53 [1949], p. 271) that a highly convex form, which has no advantages for engraving on bronze, may indicate that such objects as these are casts made from semi-precious stones, the beauty of which is enhanced by cutting *en cabochon*. It is probable that these two bronzes are casts from the same original, since in all essentials they are alike. It is true that the London bronze does not show the letters round the margin clearly, but that seems to be because its edge was ground off slightly, with resulting damage to the inscription. But whether they were cast from it or simply cut in imitation of it, that original differed in several respects from the original of the jaspers of the Lewis Collection and the Cabinet des Médailles. The chief differences are as follows. The proportions of the anguipede on the bronzes are less elongated than on the other two amulets; there is a difference of 3 mm. in the length from shoulder to the bottom of the kilt. Further, in the bronzes the cock's beak is tilted upward, making a broader angle with his neck. Consequently the comb is inclined from the vertical, while in the two jaspers it is upright; and on the bronzes its notches are more clearly indicated. These are minute points, yet decisive.

To sum up: the two jaspers of this group are closely similar and evidently derived from a common source, and the two bronzes are probably casts from an original which was not the same as that of the jaspers. Yet in all four the differences are so slight and the agreement in peculiar characteristics so striking that all must be ultimately derived from one designer; and he has departed so far from the usual type, especially in the reverse, as to cast some doubt upon the genuineness of the whole group. If the two originals were ancient, which I should not venture to deny absolutely, their designer has in any event misunderstood and wrongly rendered several details of a well-known traditional type.

E. This last group (Nos. 69-71) comprises three unrelated pieces all presenting some characteristics that betray the hand of an imitator, or at least lead one to suspect it. First, a sard in the British Museum (56069, our 69), with an attractive design of Harpocrates standing in the cup of a flower. He holds a flail over his right shoulder,

and raises his left hand towards his face; his head is encircled by twelve rays. Some other details will be mentioned in connection with the appraisal of the work. On the reverse is an ouroboros enclosing three magical words, *σουμαρτα αβλαναθαναλβα ακραμαχαμαρε*, the last two of which are very common. Outside the ouroboros runs another inscription with no recognizable elements except *σακαωθ* (error for *σαβαωθ*) and *αδω*, which is probably part of *αδωναι*. The parts of this outer inscription are separated by vacant spaces in a manner which will require comment later.

The maker of the obverse design chose a familiar type, but varied it in a manner which lays the work open to suspicion for several reasons.

1. When a lotus is part of the design, Harpocrates usually sits on the flower (or capsule) with his knees drawn up, or with his legs hanging down as if the flower were a chair, or else he kneels, often with one leg extended over the edge of the flower (see *SMA*, Pls. 9-10, Nos. 189-210). I remember no example in which he stands on a lotus, although standing types are common, especially when the god is shown as a youth rather than as a child. The validity of this observation is not affected by a peculiar case like that of a little terracotta flask in the Fouquet collection (Perdrizet, *Terres cuites de la Collection Fouquet*, Text, p. 94, No. 238; pl. 36, middle row, right and left). It is made in the shape of an Eros standing in a lotus flower with his hands tied to a column behind him. The lotus shows that here, as often, Eros and Harpocrates are assimilated (see below); but the figure stands merely because it is one of the numerous objects derived from the type of Eros standing bound to a column or a tree (references in *SMA*, p. 121, note 68). There may be dynastic sculptures or paintings unknown to me which represent Harpocrates standing on a lotus; but I have seen no such design on a genuine amulet of the Roman period.

2. In this example the flower is certainly not a lotus, as the history of the type requires, but a bell-shaped flower something like a tulip. The maker has opened a sector of the margin to show the young god's leg in the flower-cup, here manifesting some aesthetic judgment, since the effect would have been awkward if the rim of the flower had hidden the youth's leg from the knee down.

In connection with this criticism and the preceding one, it may be remarked that the present design was probably made under the influence of some fine gem of earlier style representing Eros rising from the cup of a flower. The most striking example is the Demidoff banded agate, Eros rising from a pomegranate flower and holding branches of fruit in his hands (Furtwängler, *Antike Gemmen*, I, pl. 24, No. 50; cf. No. 49 on the same plate, and a different conception of the subject, pl. 27, No. 1). The rapprochement is not inappropriate, since some of the genuine representations of Harpocrates, especially in the minor arts, have been assimilated to the Greek god of love (*SMA*, p. 144); but so marked a departure from the Egyptian type is still disturbing.

3. The god's finger is pointed towards his eye instead of towards his mouth as in the traditional type.

4. The lizard at the lower right is unmotivated and without parallel on genuine amulets.

5. Though star and crescent are regular, the extra star over Harpocrates' head is unusual. A disk, however, is often placed in that position.

To these questionable features must be added the more than doubtful inscription on the reverse, which employs two forms of epsilon (one a broken-backed form like that used in old Teubner texts) and two forms of sigma in immediate juxtaposition.

This stone, I think, is a slavish copy of a heliotrope illustrated by Chiflet (pl. 9, 35). It was not made from the engraving, however, but apparently from the original stone, which was itself a modern fabrication. The relation of the London stone to Chiflet's is placed beyond doubt by a peculiarity of their reverse sides. In Chiflet's book, Werde, the draftsman, has carefully indicated two injuries to the margin of the reverse, which have caused the loss of a few letters. That part of the text probably read $M[IXAH]\Lambda A\Delta\Omega[NAI]$. On the London stone there is no sign of injury, but two vacant spaces are left, preceded and followed by exactly the same letters that stand just before and after the chipped places on Chiflet's amulet; they are slightly differently placed because the imitator has set his letters closer together than those on his model, or because Chiflet's illustration is not quite true to the original.

There is little doubt, then, that the London stone is a copy of another modern piece. Attention may be called, in passing, to the circumstance, already noted as suspicious, that both original and copy were cut seal-fashion, i. e., to be read from their impressions. On the obverse this is shown by the position of the flail on Harpocrates' right shoulder (it is usually on the left), and on the reverse by the fact that the inscription is retrograde.

No. 56013 (our 70) in the British Museum is a modern imitation of the common "pantheos" type (*SMA*, pp. 158 f.; Pl. 12, 253-261). The face is broad, the expression mild; it looks more like a Flemish artist's notion of Silenus than the grim, scarcely human faces of the genuine specimens. The flail in the right hand is of an unknown shape, the scorpion is badly done, and the creature at the lower left seems to be an awkwardly rendered scarabaeus. The inscription on the reverse is retrograde and has across the apexes of the triangular letters the exaggerated horizontal strokes which were discussed under Groups B and C; and the phi of $\text{Pa}\phi\alpha\eta\lambda$, here written like a heavy cross, does not, according to Larfeld, occur in this form after the third century before Christ. Like other forgeries previously described, this stone is related to an engraving in Chiflet's *Abraxas Proteus* (pl. 6, 24), though there are differences. The most conspicuous is the presence of the word $\text{I}\alpha\omega$ in the cartouche of the engraving, while on the London stone the cartouche is empty; the scorpion and the scarabaeus

are also better done in the engraving. The maker of the London stone probably had before him the original of Chiflet's cut, and failed to note or to carry out certain details. It may be observed before leaving this object that carnelian, of which it is made, is without parallel as a material for the "pantheos" design; green jasper and other dark stones are generally used. Yet there is an exception in a yellow jasper belonging to the Michigan collection (*SMA*, Pl. 12, 260), and there is no reason to doubt its genuineness.

It is less easy to fix upon definite reasons for dissatisfaction with the last of these three pieces (B. M. 56456, our 71), and yet I think it open to some suspicion, especially the reverse, where the principal figure is a female griffin resting a forepaw on a wheel. That is a well-known symbol of Nemesis; but there is no characteristic attribute which would enable us to identify the obverse figure as that goddess. She stands to front, head to left, on the back of a crocodile, and is dressed in tunic and himation, the latter crossing her body and dropping behind her left shoulder almost to the ground. On her head is an ornament like a cup-shaped flower between two leaves. In her right hand she holds a snake, its head, over which is a disk, on a level with her face; in her left a tall scepter with a floral ornament on the top. Her left hand also holds a situla, not of the Egyptian form, but more like a Greek bell krater without handles, which of course would not be needed in addition to the bail of the vessel. There are four magical characters along the right margin, one in the lower left field.

On this side the only doubtful detail is the Greek shape of the situla. But one misses some definite characterization of the goddess. It might be tentatively suggested that the maker meant to represent Nemesis as identified with Isis (on this see *PW*, s.v. *Nemesis*, col. 2354)—hence the crocodile, the scepter and the situla—yet included in the design no attribute which would definitely distinguish either goddess from other female divinities.

As to the reverse, no exception can be taken to the symbolism of the griffin and wheel, and the balance, which the griffin holds in her beak, is a well-attested attribute of Nemesis. On the other hand, there is no motivation for the heron-like bird that touches the balance with its beak, nor for the bearded mask (Sarapis?) that ends the griffin's tail. Attention should also be directed to the curious object that serves as ground line. It looks like a snake holding between its jaws a small bearded male head. Yet the band round the neck of this supposed snake, just below the open jaws, is not natural; and it is possible that what the engraver intended was a small human figure with raised arms (otherwise viewed as the snake's jaws), and with its body below the arms tapering off into a long tail.

One possible explanation of this curious detail would, if accepted, argue for the genuineness of the reverse design despite its irrelevant and suspicious features. Perdrizet remarks with much reason that the griffin, which so often accompanies Nemesis on monuments of the Roman period, is not merely a characteristic attribute,

but a form of the goddess herself; and it is significant that this griffin is regularly female.⁵ On the London gem the wheel and the balance, which are attributes of the goddess, mark the griffin as the representative of Nemesis, and the strange creature that lies under the griffin may therefore be legitimately explained by reference to the monuments representing the goddess herself.

Now several of those monuments show Nemesis standing on a human figure or crushing it with one foot. The most recent discussion of the type is that of Bernhard Schweitzer, whose article gives references to previously published monuments of the kind, and to the earlier articles and monographs.⁶ This and other papers, particularly those of Perdrizet, make full treatment of the topic unnecessary here.⁷ On one of those monuments, a relief from Piraeus in the Louvre, a male figure trampled by Nemesis is of normal size, though, according to the usual convention, smaller than the goddess;⁸ the female figure under the Nemesis of a Cairo relief is also as large in relation to the divinity as would be expected.⁹ A relief from Gortyn in the British Museum represents Nemesis standing on a smaller figure which is crushed and flattened almost out of resemblance to a human body.¹⁰ In a marble statuette from Lower Egypt she rests her right foot on the head and the backward-bent feet of a small bearded figure lying prone;¹¹ and on a similar statuette from the same region and probably derived from the same model, the right foot rests on a figure which is completely indistinct except for the small head projecting beyond the toes of the goddess.¹² Finally, on an Alexandrian bronze coin of Trajan, a running Nemesis treads upon a prostrate human figure so crude and indistinct that it was at first taken for a thunderbolt.¹³

These downtrodden victims of divine vengeance may in the beginning have represented some enemy whose ruin the artist desired; but they probably came to be interpreted as Hybris, the sin specially chastised by Nemesis. It was natural enough sometimes to represent this detested vice in a sub-human form; one remembers the mediaeval conception of the Devil. On the common metal pendants of Syria and Palestine the Evil One was usually depicted in human form, and regularly female;¹⁴ sometimes, however, as a non-human creature, a sphinx or a serpent.¹⁵ If the indistinct creature that serves as ground line below the griffin is a snake swallowing a diminutive

⁵ *BCH*, 36 (1912), pp. 261-262.

⁶ "Dea Nemesis Regina," *Jahrb. deutsch. arch. Inst.*, 46 (1931), pp. 175-246.

⁷ *BCH*, 22 (1898), pp. 599-602; 36 (1912), pp. 248-274.

⁸ *BCH*, 22 (1898), pl. 15.

⁹ *BCH*, 36 (1912), p. 263, fig. 1.

¹⁰ *BCH*, 22 (1898), pl. 16, 2.

¹¹ *BCH*, 36 (1912), pl. 1 (after p. 274).

¹² *Ibid.*, pl. 2.

¹³ Dattari, *Monete imperiali greche (Numi augg. Alexandrini)*, pl. 24, 1059.

¹⁴ *SMA*, Pls. 14-16 *passim*.

¹⁵ *SMA*, Pl. 17, Nos. 324, 326.

human being, it would seem that the artist found a new use for the serpent which is placed at the feet of Nemesis on such monuments as the previously mentioned reliefs from Gortyn and Piraeus. But it really looks more like a monster made up of the head, arms, and trunk of a man combined with the long body and tail of a snake. It does not seem likely that a forger would have invented this feature of the design, since it may be regarded as a natural development from the small, crushed, barely human figures mentioned above. To that extent, then, it may indicate the genuineness of the reverse design, despite an unfavorable impression created by its general style, and particularly by such irrelevant things as the star and crescent, the heron, and the curious treatment of the griffin's tail.

We have brought together here a group of forgeries, some patterned upon Chiflet's engravings or Montfaucon's reproductions of them, some apparently direct copies of the actual stones that Chiflet illustrated, and one or two that may be modern fabrications with no precedent in ancient art. This gathering of doubtful and more than doubtful specimens may prompt a reader to accept the assertion of certain writers that spurious magical amulets were manufactured in great numbers. Yet I still hold to the opinion that I expressed briefly in the preface to *Studies in Magical Amulets* (p. viii), that the number of forgeries is small in comparison to the great mass of genuine ancient amulets. There are indeed many crude and ignorantly executed examples of common magical designs, some of them so degenerate as to be meaningless; but their gross faults do not prove them to be modern forgeries. Many such pieces were produced in ancient times in response to a demand for cheap amulets, and their makers naturally followed the designs of abler artists, often disgracing their models. There is no reason to think that in modern times there has been wholesale forgery of such objects, and it is certain that several of the known forgeries, perhaps most of them, date from the seventeenth and eighteenth centuries, when the interest aroused by the publications of Gorlaeus, Chiflet, Capello and Montfaucon was in full vigor.

SUPPLEMENTS AND CORRECTIONS OF *STUDIES IN MAGICAL AMULETS*

In an article that is professedly supplementary to *SMA*, it is appropriate to introduce some amendments of that work. For three of the most important I am indebted to Mr. Seyrig, to whom I also owe the privilege of publishing his recently acquired coin amulet, No. 72 in the following catalogue, and also No. 73.

The last four items are very late additions, and not in their proper places. The last of all (17) would have been inserted in the Catalogue

had that not entailed re-arranging and re-numbering.

1. Pp. 64-66. Professor S. Eitrem returns to the discussion of the Copenhagen and Michigan colic amulets in *HTR*, 43 (1950), pp. 173-177, suggesting that the object shown in the field above the eagle is a *sella curulis*, here a symbol of imperial power. The object on the Copenhagen stone can certainly be so interpreted, but it is hard to imagine the "heraldic considera-

tions" that led the engraver to represent it upside down, a position that might easily be taken to suggest the subversion of authority; and the garland is certainly placed with exclusive reference to the eagle, not to the chair. Further, the corresponding object on the Michigan stone cannot be naturally interpreted as part of a chair (the stone is a fragment, about half its original size). On the whole, the interpretation of the objects in question remains uncertain.

2. Pp. 69-71. An unpleasant remedy mentioned in Argenti and Rose, *Folk Lore of Chios*, I, p. 411, shows that the belief in the lizard's value for ailments of the eyes survived until recent times.

3. P. 88. Here I would refer the reader to a note by Professor H. J. Rose, published in *HTR*, 44(1951), pp. 59-60. In the charm on the obverse of my number D. 144, he prefers to read the first two words as *διψᾶς, Τάνταλε*; a question followed by the command *αἵμα πίε*. That makes a better construction, and many readers will prefer Rose's explanation. For two reasons I am not entirely satisfied with it: 1) because questions are unusual in charms (but see No. 51 in this paper), and 2) because in view of the reverse design of D. 144, one would expect the command to be addressed to the snake, which approaches the lip of the vessel. The fact that there are actually two snakes, one at each side, is of no importance; considerations of symmetry were decisive. In any event, Mr. Rose's opinion should be carefully considered in his own statement of it.

4. Pp. 90-91. Two of the strange popular fancies mentioned in this passage, namely that the womb has an independent life, and that it has an octopus-like form, seem to survive, somewhat modified, in a curious belief reported from a village in northern Chios (Argenti and Rose, *Folk Lore of Chios*, I, p. 270):

"In Kampia, where as already mentioned a special precaution is taken to ensure the coming away of the afterbirth, a curious reason is alleged for this: it is a live thing and can move about like an octopus (*σὰν χταπόδι*), so, if not properly attended to, it would climb up to the mother's throat and choke her."

The apprehended danger may have been suggested by an internal sensation sometimes associated with hysteria in women.

5. Pp. 93-94. What is said here about the ancient birth chair may be supplemented from the material presented by Argenti and Rose (*Folk Lore of Chios*, I, p. 259). It appears that a chair somewhat like that described by Soranus was used in Chios until recent times. I am not sure, however, that the ancient terracottas to which the authors allude actually represent this *δίφρος μαιωτικός*, as Soranus calls it. The eighth edition of Ploss-Bartels, *Das Weib*, to which Argenti and Rose refer (p. 259, note 3) is not at hand; but the ninth shows a terracotta group from Cyprus, now in the Louvre (Ploss-Bartels, *op. cit.*, II, p. 186, fig. 472), in which, not the pregnant woman, but a female helper leans back in a low chair supporting the sufferer in a firm grasp before her, while a midwife sits on the ground facing the parturient woman. The arrangement is similar in a terracotta from Nicosia, Cyprus (sixth century B.C.), which is shown in Plate 1 of an article by Argenti.¹⁶ On the other hand, the real birth chair may have once formed a part of the group represented on plate 2 of the same article; it is of the same period and origin. Here the position of the patient seems to show that her hips and back were once supported by a low chair. Since there are no traces of a helper's hands on her sides and back, a chair was almost certainly there when the group was intact.

6. P. 125. The power of the cock against all demonic influences is more fully illustrated in

¹⁶ *Journal of Obstetrics and Gynaecology of the British Empire*, 51 (1944), pp. 344 ff.

Note Complimentaire XVI (by Louis Canet) in Cumont's *Lux Perpetua*, pp. 409-411.

7. P. 171. I learn with regret that a sentence on this page has been taken for a criticism, put forward as my own, of another writer's work, whereas I intended only to report the reason why he himself had proposed a theory with appropriate caution. From the beginning (*JAOS*, 50 [1930], p. 214), I was apprised of the grounds which led Mr. H. C. Youtie to attach certain reservations to his interpretation of a gem inscription in the Newell collection (*ibid.*, pp. 214-220). Those reservations were present to my mind when I mentioned his article. I used the word "tentative" thinking it would imply that he proposed his interpretation cautiously precisely because he was aware that it rested upon an assumption which was "not very satisfactory" for reasons which he had candidly stated. Certainly I had no thought of offering an independent criticism, for which, in fact, I am not equipped by an adequate knowledge of the Semitic languages. However, since the purport of my words has been misunderstood, I am glad to offer this explanation.

8. P. 173. *Εμπαυνηλ* seems to be only an angel name in *PGM*, XLIII (Vol. II, p. 179).

9. Pp. 216-217. P. 7 in Preisendanz's list of Christian amuletic papyri (*PGM*, II, pp. 195 f.) contains medical recipes accompanied by two bits of religious narratives, which are best understood as examples of Heim's *historiolae* (see his *Incantamenta Magica*, pp. 495 ff., in *Jahrb.*, *Suppl.* 11), fragmentary stories used as charms. Nock is surely right in suggesting that the legends used were "invented *ad hoc*," not cited from apocryphal gospels or apocalypses. Several modern examples, all turning upon acts or sayings of saints or of divine persons may be found in the chapter on folk medicine in Argenti and Rose, *Folk Lore of Chios*, I, between pp. 387 and 416.

10. P. 257, Pl. 1, 22; described as head of Sarapis over a griffin. Behind the head is a

projection which I carelessly assumed to be a pit in the material, or else a cut made by accident. In fact, as Mr. Seyrig acutely observes, it is the end of a club; consequently, since there is no polos or modius on the head, the god must be, not Sarapis, but Herakles, here the god of Herakleopolis. Coins of the Herakleopolite nome show him standing, holding a griffin on his extended hand; cf. *B. M. Cat. Alexandria*, p. 357, No. 81 (Antoninus; no illustration), Dattari, *Monete imp. Alexandr.* pl. 33, No. 6250 (Domitian). To these references of Mr. Seyrig's I would add Milne, *Cat. Alex. Coins in the Ashmolean Museum*, pl. 2, 1677 (Antoninus), bust of Herakles with the end of the club showing behind his head; there is no griffin.

I should have been warned by the circumstance, which a belated search reveals, that the griffin is not associated with Sarapis on the rather numerous glyptic representations of the god. The griffin seated in front of him on a gem in the British Museum really belongs to Nemesis, who stands facing Sarapis (Walters, *Cat. Engraved Gems*, pl. 18, No. 1266).

11. P. 257, Pl. 2, 26. Isis as Demeter, running to l. holding a flaming torch across her body; polos on head. The unusual attitude, for which I remembered no parallel, is illustrated by Mr. Seyrig with a reference to Perdrizet, *Terres cuites grecques de la Collection Fouquet*, p. 108 (pl. 18, left below). This is a statuette of Isis moving to r., holding a large torch diagonally across her body. Perdrizet remarks, "Ce type est inspiré, je crois, par les rites qui rappelaient les courses d'Isis à la recherche d'Osiris, quand celui-ci avait été tué par Typhon. D'autres terres cuites gréco-égyptiennes montrent Athéna-Néith courant de la même façon, avec la grande torche tenue horizontalement. Cela s'explique par l'identification de Néith avec Isis" (pl. 58, r. above, and Text, p. 68, Nos. 168-169).

Mr. Seyrig adds: "I should be inclined to recognize here a possible Eleusinian influence. In that case, however, the Greek influence prob-

ably only covers an old Egyptian ritual found also in the cult of Athena-Neith at Sais (with torches), and in the Egyptian cult of Artemis Phosphoros (P. Roussel, *Cultes égypt. à Délos*, p. 105). These rituals certainly have in view the fertility of the fields, and therefore, it seems to me, the figure with ears of wheat that emerges from the ground could be Ge Karpophoros."

12. P. 298, No. 270. Here Mr. Seyrig proposes the simpler reading Παρηγορίου ὑγία, "Paregorios' health!" The name is adequately attested, and the phrase is a wish for the health of the wearer. Four rings bearing the inscription ὑγία with a name in the genitive were published by Dalton, *Cat. Early Christian Antiquities in B. M.*, p. 25, Nos. 149-152. I deplore but cannot explain or excuse my blindness to this obviously preferable treatment of the inscription.

13. P. 322. With the name Melchias we may compare Melchiel, an angel name in *PGM*, XLIII (Vol. II, p. 179).

14. Pp. 123-139; also Nos. 29-31 and 38 in the following Catalogue.—In the January, 1951, number of the *Harvard Theological Review* (Vol. XLIV), Professor M. P. Nilsson has published a short paper, "The Anguipede of the Magical Amulets," which contributes an important point to the explanation of this strange form. I recognized (*SMA*, p. 128), as others had done, the solar character of the cock, and the relation of the serpentine legs to the types of the earth-born giants; and the military dress of the human torso was known to be derived from the armed statues of Roman emperors. The reason for the junction of the cock's head with the snake legs was not, however, clear to me. Professor Nilsson argues, with great probability, that the figure, represents a cosmic god, in whose image a symbol of the upper world of light is combined with an element suggesting the underworld, the whole representing the god's dominion over the entire

universe. For support of his view, he refers to the so-called Jupiter-Giant columns of the Rhine region, and the Igel column at Trier, which he has discussed and interpreted elsewhere (*ARW*, XXIII [1925], p. 175).

As Professor Nilsson justly observes, the origin of a cosmic god must be sought in the realm of philosophy and science. To continue this thought, one may say that the idea of such a god may spring from the mind of one or more individuals; but the propagation of the idea must be the work of a group or "school," whether it be one that was led by learned teachers and exerted a far-reaching influence, or a mere obscure conventicle (see *SMA*, p. 135). Further, full agreement is scarcely to be expected even among different branches of the same school of cosmic religion. The cock's head predominates in the anguipedes of the amulets (exceptions in *SMA*, pp. 128-132, Pl. IX, 180-187); yet it does not appear on the Jupiter-Giant columns and kindred monuments.

It would seem, then, that the cockheaded type must have had its origin in a school of cosmic religion, perhaps a small one, the center of which was somewhere in the Levant or in Egypt, where most of the amulets were made. The presence of the cock's head, apparently an Iranian element, and of the Hebrew name Iao, often inscribed on the god's shield, make it all but certain that the combination came into Egypt from the northeast. The cockheaded anguipede was probably first sketched by some artist who belonged to, or was instructed by, a group of cosmic worshippers in Syria, Palestine, or Phoenicia. The group may have disintegrated soon, and certainly it has left no documents explaining the visual representation of its god. Why, then, have hundreds of stones bearing his image survived?

To that question I am content to offer a simple and obvious answer. It may well be for no better reason than this, that the novel monstrosity of the cockheaded anguipede, once seen, appealed strongly not only to the actual members of the cult, but also to others who were

ignorant of the symbolism implicit in the design, particularly to makers and wearers of amulets. In the eyes of such people the god would seem to be endowed with a magical power all the greater because his image was a complex of various elements, just as other well-known designs of a pantheistic character were credited with special potency; see the remarks on pantheistic monsters in *SMA*, p. 156.

15. P. 319, No. 387; and No. 14 in the catalogue of this article. In *JHS*, 55 (1935), pp. 232-235, Anne Roes has shown convincingly that the designs known to us as grylli are Roman adaptations of Iranian composite figures originally representing divinities who appeared in various forms. I noted this important article when it appeared, but unfortunately forgot to make use of its conclusions in *SMA*. They have now been taken up and carried further by Professor A. Alföldi, in an article which the writer's kindness has enabled me to examine ("Der iranische Weltriese auf archäologischen Denkmälern," *Jahrb. 40 der schweiz. Gesellschaft für Urgeschichte*, 1949-50, pp. 17-34; 4 text figures, 10 plates); see his pages 22, 27, with references.

16. Pp. 156-159, and Nos. 40-43 in this paper. The article by Professor Alföldi cited in the preceding note reproduces (pl. VIII, No. 2) an intaglio of the Cabinet des Médailles in Paris (Bibliothèque Nationale), which apparently came into that collection comparatively recently, since it is not in Chabouillet's *Catalogue* nor in the *Guide illustré* of E. Babelon. Here I think that Professor Alföldi's zeal in seeking out forms related to his Iranian cosmic giant has carried him too far. The Paris stone was first published by H. C. Puech (*Documents: archéologie, beaux-arts*, etc., II, [1930], pp. 422-425, figs. 6-7). The obverse design represents a four-winged, four-armed demon standing on a cartouche. The body is that of a scarabaeus, the head, according to Puech, is that of a cynocephalus baboon, or perhaps of an ass.

Alföldi correctly, I think, takes it to be the head of a horse. The workmanship on such amuletic stones is so crude that details of this sort are often doubtful; but the small ears, the blunt muzzle, and the long neck, broadening in side view to the shoulders, favor Alföldi's view. However, with the exception of this equine head, every detail of the Paris design has its parallel in the pantheistic monsters which are common on magical stones; and these "pantheoi," as I call them for convenience, are undoubtedly Egyptian in origin. Puech and others think that such figures are pantheistic developments of the dwarf-god Bes.

Pantheistic demons represented with horse-heads are certainly rare, and it is true that a horse's head enters into many of the composite forms which Alföldi cites from Iranian material. But it is quite unnecessary to assume, as Alföldi does, a kinship between the Paris intaglio and the Iranian mixed forms merely because the demon of the Paris stone has a horse's head. There is reason to think that a horse-headed figure which appears on some amulets of the Roman period, and also on leaden curse-tablets, represents a sort of demon invoked *ad hoc* by racing charioteers and their backers (*SMA*, pp. 113-114, and Pl. 7, 155; compare also Pl. 2, 42; Pl. 3, 43, pp. 259-260; and No. 11 in this paper). The figure on the Paris amulet may represent a fusion of a horse-headed god of charioteers with a beetle-bodied pantheos (see *SMA*, pp. 159-160, with Pl. 3, 66, where the head may be that of a horse rather than a jackal; also Nos. 40-41 in this paper).

17. Pp. 156-157, and 294-295 (Nos. 251-252). Mr. Henri Seyrig has recently sent me photographs of an ancient gold ring, the form of which, in his opinion, would assign it to the third Christian century. It is now in commerce in Beirut. The setting is a circular haematite amulet, well preserved and a good specimen of its kind, but of no great importance otherwise. Its good condition and the presence of an

unusual magical name may justify its inclusion here with a drawing of the ring (Fig. 1), and



Fig. 1

a direct photograph of the stone (Pl. 100, Suppl. 17).

Mr. Seyrig's dating of the ring was given provisionally, but it seems to be confirmed by some examples shown in Marshall's *Catalogue of the Finger Rings in the British Museum*, pls. 6-7, Nos. 262-265. All four are set with coins of known dates. In No. 262, the coin is a later insertion, but the editor believes the ring to be third century work. The other three have gold coins of Caracalla, Elagabalus, and Diocletian (300), and it is not likely that the rings were made long after the times when the coins were new. The style of No. 264 is nearest to that of the Beyrouth ring. A third century date for the ring is consistent with that of the setting, though the engraving of the stone may be considerably older, since the "Pantheos" shown upon it is simpler and more distinct in details than many other specimens of that type.

The hoop of the ring expands upward and projects beyond the shoulders, which it joins with a curved notch (for this detail, see Marshall, p. xlviii, E xxix, and pl. 15, No. 526). The hoop ends in volutes somewhat like those on Marshall's No. 264, which, however, reach to the edge of the bezel, whereas in the Bey-

routh ring they are separated from it by the notch. The ring is 31 mm. wide, 22 mm. high; inside measurements, 17 mm. wide, 14 mm. high.

The haematite setting is almost circular, 20 x 19 mm. The design represents a four-armed, four-winged god with youthful face, apparently a type of Horus, standing to front on an empty cartouche formed by an ouroboros. The arms hold upright four tall staves, the slanting tops of which show that they are meant for *was*-scepters. An uraeus rises at each side of the neck. The god wears an apron, and an amulet rests on his breast. The elaborate head-dress is made up of three parts, first, the vulture cap of the goddess Mut, on which rests a member in the form of a trapezoid lying on its shorter horizontal side. This, in turn, is surmounted by a trident-like ornament, perhaps a schematic indication of the hemhem crown (three reed-bundles resting on a pair of horns). The cap of Mut, who is herself sometimes depicted in the form of a vulture, is to be seen in a good illustration from the Harris Papyrus, used as frontispiece to Erman's *Religion der Ägypter* (1934); for another example, see Lanzone, *Dizionario di Mitologia Egizia*, pl. 135, 1. The vulture headdress seems to symbolize the protection extended by the mother-goddess Mut to the child Horus. This motif is used with more striking effect in two amulets described in *SMA*, pp. 156-157; see also pp. 294-295, Nos. 251-252 and the corresponding figures on Pl. 12.

At the left side of the stone, reading upward, is the name *Aζαβαπος*, which I have not noted elsewhere; the last letter is at the right of the god's crown. On the right side is a column of meaningless signs, among them a star; two or three can be read as Greek letters.

CATALOGUE ¹⁷

- 1 56024 ending at 1. with the seven in their proper order.
 Obsidian. Upright oval, 23 x 17.
 This stone is to be compared with one in the Seyrig collection (*SMA*, p. 255, Pl. 1, 12); there, however, the position of the small figure is different.
- 3 56412
 Obv. Mummy of Osiris, with indistinct crown, lying with head to r. over a serpent, the head and neck of which curve back over the mummy. Two crowned hawks perch on the snake's neck. In field at upper l., a star, a scarabaeus, and a crescent moon.
 Rev. *Δαμναμενεν*.
 Green jasper. Transverse oval, 21 x 16.
 This type is discussed and other examples are cited in *SMA*, pp. 231 f., 312, Pl. 19, 350.
- 4 56477
 Obv. At center, Hathor-Aphrodite standing to front, head to r., clothed in short-sleeved tunic and mantle draped round body from hips to ankles. A four-pointed ornament on head may be meant for the crown of two feathers between horns. Her r. hand holds tall scepter with figure of a cow on the top, with l. hand she touches the shoulder of Osiris, who stands at r. facing her. The upper part of his body is covered with a network of cords or bandages (a survival of the representation of the god as a mummy); an upper garment hangs over his l. arm and is wound round his waist and thighs. Disk between horns on head. L. hand holds a tall scepter, the top of which has been chipped off, r. touches the mantle of Hathor below the waist. At l., behind the goddess, Harpocrates stands to l. on a small pedestal or
- 1 56024
 Obv. Osiris as mummy standing to front on low pedestal; atef crown on head, crook over right shoulder, flail (ladanisterion) over l. Narrow collar with pendants round neck, a larger one round clavicles.
 Rev. Ouroboros enclosing the inscription ΑΦΘΕΧΕΧΩΜΦΧΕ ΤΑΛΑΡΑΙΩ ΩΑΡΛΟΡΟ ΝΤΟΚΟ ΝΒΑΙ. Star above the first line.
 Unidentified green stone; its outline is like that of a lead plummet. Obv. convex, rev. flat. 33 x 20.
 The obverse design is well executed, and may be of the Ptolemaic period. The ouroboros and inscription on the reverse are certainly of later date, and although the lettering resembles that used on many amulets of the Roman imperial period, there are some suspicious circumstances, such as the use of the letter F (though a similar sign sometimes occurs as a magical character) and a round epsilon along with a straight-backed one (reversed). Furthermore the latter part of the inscription was borrowed for a certain forgery (see *SMA*, p. 281, Pl. 8, 173), though that is not conclusive evidence against its genuineness here.
- 2 56525
 Obv. Osiris as mummy wrapped in a network of bandages, standing to front. Disk over head, vulture's head at each side of face. Two pairs of wings attached to shoulders. At l. below, a small figure, probably Harpocrates, sitting with knees drawn up, back to the mummy. A tall indistinct ornament rises from his head.
 Rev. Ouroboros enclosing a scarabaeus, round which, beginning above, runs a long inscription consisting of permutations of the vowels,

¹⁷ In the following Catalogue registration numbers accompanied by no other sign of location are to be understood as belonging to gems in the British Museum.

altar. He is nude except for a kilt, and has on his head an indistinct ornament perhaps meant to suggest the hemhem crown (three papyrus bundles resting on a pair of horns). Star over his head, one over the heads of Hathor and Osiris, and eighteen others in vertical columns between the figures and between the group and the margins.

Rev. plain.

Limonite. Broad upright oval, 48 x 37, pierced for suspension. Chipped at upper r., lower l., and bottom. The irregular broken line which encloses the group seems to have been scratched later, and forms no part of the design.

5

56526

Obv. Sarapis enthroned to l., flying scarabaeus over head; r. hand touches scorpion at feet, l. rests on tall scepter. Throne rests on crocodile, head to l. Under this, Osiris mummy with atef crown, lying with head to l. over lion walking to l. The whole design is surrounded by a serpent with human head, which is turned inwards and faces Sarapis. This head is adorned with a disk between two horns. Round margin outside the serpent runs the *Iαεω* palindrome complete except for the last four letters (see *SMA*, p. 204). Behind Sarapis' l. arm is an uncertain object probably meant for a star within the tips of a crescent, and below that, arranged in three lines as an inverted pyramid, the seven vowels and an extra omega.

Rev. Harpocrates seated to l. on lotus with two buds, ovoid ornament on head, r. hand raised towards mouth; flail (ladanisterion) over l. shoulder. Star in front, star and crescent behind. Round margin a series of meaningless signs, a few of which can be read as Greek letters.

Bloodstone. Upright oval, 37 x 28 x 4.5. Rev. chipped at upper edge.

Very crude work, especially the reverse. The stone is to be added to a series of four discussed in *SMA*, pp. 235-238, 313-314. Pl. 19, 354-357.

6

56408

Obv. Fully draped person with heavy hair, apparently beardless, modius on head, standing to front on a low cross-hatched base which has a sort of standard curving outward at each side. R. hand raised, palm outwards, l. holds a heavy scepter round which a snake twines. Upper garment over back and rolled around l. arm.

The lack of a beard and the length of the garment suggests that the person may be Isis, who is occasionally represented wearing the modius, not Sarapis. Crude work.

Rev. plain.

Green jasper. Upright oval, 17 x 14.

7

56427

Obv. Bearded head (Sarapis ?) to front resting in the mouth of a large vessel (stamnos ?). On the head, a modius and six rays. The hair is parted in front and heavy locks are drawn back and allowed to fall over the ears. From the foot of the vessel an ear of grain rises at each side. In the right-hand handle of the vessel there is a larger ear of grain, or possibly a palm frond. In the other handle is thrust a caduceus of elaborate form; two snakes with heads confronted make a large loop, and on the top of the staff there seems to be a small crocodile. Between the caduceus and the edge of the stone, reading downwards, ΑΙΩΝ, the N reversed.

Rev. plain.

Amethyst. Upright oval, 18 x 13.

Despite its careful workmanship, the gem does not make an entirely satisfactory impression. The shape of the vessel and the form of its handles are unusual, and the cast of Sarapis' features and his expression are quite different from most of the representations of this god on gems; cf. Walters, *Cat. of Engraved Gems in the British Museum*, pl. 23, 1775-91. (Possible influence of Dionysus type?)

8

56548

Obv. Anubis standing to l., though the torso is

shown as from front; nude except for kilt. His r. hand grasps a serpent with a small disk on its head, his l. holds a sword point upward.

Rev. $\chi\nu\chi\beta\alpha\kappa\acute{\alpha}\xi\iota\chi\nu\chi$.

Mottled jasper, brown and yellow. Upright oval, 29 x 22. Obv. flat, reverse convex. Good work.

9

56553

Obv. Ouroboros enclosing two divinities. At l., Anubis standing to r., ankh in l. hand, tall was-scepter and also a shorter one in l., star over his head. At r., seated facing Anubis, a hawk-headed god (Horus), with garment wrapped round waist and hips, r. hand raised, palm outward. Headdress resembles two broad feathers, but may have been meant for a disk. Between the two figures, the letters $\iota\omega$. Under their feet, a crocodile. Outside ouroboros the inscription $\chi\rho\upsilon\theta\iota\gamma\lambda\iota\omicron\upsilon\eta\mu\chi\rho\upsilon\theta\iota\gamma\lambda\iota\omicron\upsilon\eta\mu\chi\rho\upsilon\theta\iota\gamma\lambda\iota\omicron\upsilon\eta\mu$.

Rev. plain.

Material not noted. Upright oval, 26 x 20.

10

56166

Spindle-shaped, beadlike stone, truncate at ends, slightly flattened on two opposite sides in order to receive the incised designs. On each flattened side are two figures placed feet to feet; on the round sides, inscriptions running vertically.

A. Above, Anubis standing to l. in kilt and boots; r. hand holds tall scepter, l. situla. Below, draped female figure from waist down, the upper part broken off.

B. In vertical column, $\alpha\beta\lambda\alpha\nu\alpha\theta\alpha$, the rest, $\nu\alpha\lambda\beta\alpha$, lost.

C. Above, mummy wound in a network of bandages, feet showing at bottom. The indistinct head, which is surmounted by a three-pronged ornament, was probably meant to show a face with three or four animal heads projecting from each side, like certain pantheistic figures, some of which may be founded upon the type of

Osiris as mummy (see our No. 2, and compare *SMA*, Pl. 12, 254; Pl. 13, 265-266); the engraver, however, produced only a confused blur of strokes. At each side are some meaningless letters, mainly lambdas and iotas. Below, a figure of the anguipede demon, of which only the waist, kilt, and snake legs remain; the rest is broken off.

D. In vertical column, $\sigma\epsilon\mu\epsilon\sigma\epsilon\iota\lambda\alpha\mu$, the last letter broken; 5 or 6 letters must have followed, perhaps $\lambda\alpha\iota\lambda\alpha\mu$, which often accompanies the former word; cf. *SMA*, p. 287, No. 207; also p. 187.

Haematite. Fusiform, present length 34, originally *ca.* 47; width of flattened sides *ca.* 8-9. New grooves round the lower end show that the piece was remounted after the original end was broken off.

The account of this stone in *SMA*, p. 243 is to be corrected by the description above. In his *Gnostics and their Remains*, pl. F 5, King published an inaccurate drawing of it which was used by both Delatte and Preisendanz in their respective discussions of the Headless God (Delatte, *BCH* 38 [1914], pp. 193 and 234; Preisendanz, *Akephalos* 17 [*Beihefte zum Alten Orient*, 8]); but I cannot believe that the engraver intended to represent the mummy as headless.

11

Unknown location.

Obv. God or demon with non-human head, standing to l., clad in kilt and boots. R. hand holds a tall scepter. L. hand holds a mace or baton from which two streamers depend; the one nearer the body might be meant for the end of a chlamys, but no part of such a garment is visible elsewhere. Ten stars in field.

The head may be meant for that of a jackal, and the figure would then be Anubis; but the bluntness of the muzzle suggests that of a horse. In that event the object is to be compared to the horse demons discussed in

SMA, pp. 113-114; see the illustrations, Pls. 2-3, Nos. 42-43; Pl. 7, No. 155.

Rev. not seen.

Material not reported. Very broad upright oval, 29 x 27. From a wax impression, reversed in printing.

12 Unknown location.

Obv. Hawk-headed god standing to l., clad only in kilt. Disk on head; in r. hand a scepter with a crowned hawk on its top, in l., ankh. The muscles of the chest and calves are strongly marked. In r. field, beginning at top, *αβρασαξ*.

Rev. *θωξαξαλωθ* (a palindrome) *αβρασαξ*, in two lines running with the longer axis of the stone.

Material unknown. Upright oval, 26 x 16.

This object is described from a sealing-wax impression. The photographic film was reversed in printing to show the design as the maker meant it to be viewed. Described without an illustration in *SMA*, p. 130. For a similar type cf. *SMA*, pp. 129-130, Pl. 9, 187.

The obverse type may be derived from the hawk-headed Horus; but the use of the word *abrasax* on both obverse and reverse seems to indicate that the maker connected it with the cock-headed god to be described under later numbers.

13 56033

Obv. At l., lion-headed god standing to r., nude but for kilt. A snake encircles his waist, its head against the l. side of his chest. Disk on head, which is encircled by a nimbus with seven double rays. From r. hand a twisted cord (?) hangs to ground. L. hand grasps the middle of a curious standard (?) just above the r. hand of an ass-headed god (Set) who faces him. This figure also is nude except, for the kilt; the maker may have meant to indicate a snake round the waist, but this is not certain. From Set's l. hand a twisted cord hangs to the ground. The two

figures stand on a narrow base with cross-hatching.

At the middle of this base, between the feet of the two standing figures is a hemisphere with a star on each side; from it rises the main stem of the previously mentioned standard, which widens slightly from bottom to top and is cross-hatched like the base. At the top is a circle enclosing a star. Below the hands of the two gods the upright standard forms the axis of a rhomboid figure, the broad angles of which are formed with double lines cross-hatched between.

Rev. The seven vowels in "pyramid" sequence, one alpha, two epsilons, and so on to seven omegas.

Haematite in silver mounting. Upright oval, 27 x 23. Better work than most stones of this class.

The lion-headed god is evidently a solar deity, probably Horus (see Budge, *Gods*, II, p. 360; Lanzone, *Dizionario di Mitologia Egizia*, Pl. 244, 1); but in the period when these amulets were made, Horus and Set were usually represented as enemies, since they so appear in the cycle of Osiris legends. In much earlier times certain legends treat them as allies (Erman, *Religion der Ägypter*, p. 37; Budge, *Gods*, II, pp. 241-244); thus they join in pouring life over Seti I (Budge, II, p. 248, plate), and in holding the ladder of heaven (Budge, I, p. 490; II, p. 242). It seems scarcely likely that the gem under discussion could have been suggested by some ancient representation of the latter scene, but the possibility should perhaps be mentioned. As far as I know, all dynastic representations of Horus with Set show the former as human-headed or hawk-headed, not with the head of a lion.

14 56190

Obv. So-called gryllus, a fanciful combination of a bearded human mask (to l.) and a ram's head (to r.) holding an ear of grain in its mouth, supported by the legs of a cock. The

- upper part of the design, which in other examples often shows the head and neck of a horse, is chipped off. In the field, directly in front of the human face, is a lion running towards the top of the stone. Separate elements are not infrequently introduced in the field of such designs, for example the dolphin and palm branch on a stone from a Roman bath west of the Areopagus, recently published by H. A. Thompson (*Hesperia*, 18 [1949], p. 226 and pl. 46, 5; cf. the closely similar Berlin specimen, in Furtwängler, *Beschreibung*, No. 8532); but I have not seen a lion so placed on any other examples.
- Rev. Ibis (symbol of Hermes-Thoth) to l. holding a caduceus under its wing. The bird's head is encircled with a nimbus and rays (partly broken away), perhaps an indication that the ibis here does duty for the phoenix also (*SMA*, p. 60, and Pl. 5, Nos. 103-104). Under the bird's feet is a rectangle enclosing the word *IAW*. In field at r., arranged vertically, a star and *AZ*; at l. two characters and *B* lying horizontally.
- Obsidian. Upright oval, 24 x 17. Chipped at top.
- 15 56447
- Obv. Ram-headed god, ithyphallic, with heavy body and short goat legs. R. hand holds an uncertain three-lobed object. Ram on ground at the god's feet. The figure may be a late conception of the god Chnum, perhaps identified with the ram-headed god of Mendes; cf. Budge, *Gods*, II, p. 354. A ram-headed god whose other parts are human is represented on a stone in my collection (*SMA*, pp. 261-262, Pl. 3, 52).
- Rev. plain.
- Material not noted. Upright oval, 11 x 8; enlarged 2 x 1 on the plate.
- 16 Cairo Museum, 60598
- Obv. Cynocephalus standing to r., paws raised in adoration. Headcloth with disk on head. Star in front, crescent moon behind. On

ground at r. a hawk, at l. a scarabaeus. For similar designs, see *SMA*, Pl. 12, 245-247.

Rev. *ψουρηκιληλαν φύλαξε*. The first word has not been noted elsewhere; the second seems to be a hybrid of *φύλασσε* and *φύλαξον*, in which a confusion of the sounds of *σσ* and *ξ* may be involved. See *SMA*, pp. 81-82, 96.

Material not reported. Upright oval, 23 x 17. The illustration is made from a direct photograph of the stone, which I owe to the courtesy of M. Guéraud.

17

56264

Obv. Above, a group of two gods. One, apparently meant for Zeus, is bearded, and stands to front before a throne, head to l., thunderbolt in r. hand, l. resting on arm of throne. Garment wrapped round body from waist to ankles. Behind him, and slightly leaning over his shoulder, a beardless god of slighter build, nude but for a kilt, holding a hammer over his shoulder. At each side of the group a roaring lion faces outward. In the exergue, which occupies almost half the surface, two birds, apparently eagles, stand to r. and l., their heads turned back towards each other. At bottom an indistinct human head set between spread wings; upper part of a siren?

Rev. Four non-Greek characters.

Chalcedony. Upright oval, 15 x 12.

The group might be taken to represent Zeus and Hephaistos, the latter here conceived as a youth; but it is more likely that the engraver had in mind the Kabeiroi, the elder identified with Zeus. For this identification see Kern in *PW*, s. v. *Kabeiros*, 1426, and *Schol. Apoll. Rhod.* 1, 916-918 b; also B. Hemberg, *Die Kabiren* (Uppsala, 1950), p. 262. For the younger figure, compare the Kabeiros shown in *SMA*, Pl. 4, No. 70.

18

56524

Obv. At l. fully draped goddess standing to r., extended r. hand resting on a tall staff, l. holding out a pomegranate (or possibly an

aryballos or a low-lipped sacrificial vessel of Egyptian type; for the uncertainty, cf. my remarks in *Hesperia*, 15 [1946], p. 55, and the illustrations on pl. 12). At r., Nemesis, winged, standing on tiptoe to l.; lowered r. hand holds a leafy branch, l. raised towards lips (a suggestion of the traditional gesture of Nemesis, spitting in bosom of tunic?); four-spoked wheel at feet. In field above, star within horns of crescent moon. In exergue *φυλασσαι* (l. *φύλασσε*), retrograde, the sigmas made with four strokes.

Rev. *Ιαω σαβαω αδωναι ζαβουρη ιουβω*, a line to each word.

Brown carnelian. Transverse oval, 17 x 13.

Because of the balanced position of the two figures, one is tempted to explain the obverse design as the two Nemeses of Smyrna (Paus. 7.5.2); but on the coins of Smyrna the two goddesses are not so clearly differentiated as here (compare the coins illustrated in the British Museum Catalogue, *Ionía*, pls. 26, 17; 28, 4; 29, 9, 14, 16). It is perhaps safer to call the lefthand goddess Aphrodite. The combination of the goddess of love with Nemesis on an amulet would have a certain propriety, since Nemesis is often mentioned as the avenger of scorned or injured lovers (Roscher, *Lexikon*, III, 1, pp. 133-134).

The word *ζαβουρη* on the reverse is an error for *ζαγουρη*, a magical word that seems to be especially associated with Harpocrates (*SMA*, pp. 159, 198).

19 Unknown location

Obv. Two nude youths standing to front, each with an arm round the other's shoulders, the free arms holding the ends of a long staff which passes behind their backs; their faces are turned each towards the other. Round the edge *Δαμναμενευς νεβουτοσσοναληθ*, the final theta made small and placed high because there was no room for it on the line. The two magical words are often found on amulets and in magical papyri; they are discussed in *SMA*, pp. 197, 201.

Rev. Not seen.

Material not reported. Upright oval, ca. 20 x 17.

Described and illustrated from a sealing wax impression, reversed in printing.

The design represents the constellation Gemini. The attitude of the youths resembles that shown on the planisphere of Cod. Vatic. gr. 1087 (Pl. 1 in Boll's *Sphaera*) and on the globe held by the Farnese Atlas (published by Passeri in Gori's *Thesaurus gemmarum antiq. astriferarum*, III, Pl. 4). But the staff is a detail for which I know no parallel.

20

56260

Obv. Chnoubis serpent with large leonine head to r., body descending in wavy line, not coiled. Round head six double rays; over them the seven vowels in proper order, a letter over each pair except the fifth, which has two (omicron and epsilon).

Rev. At top, the common Chnoubis symbol, a line crossed by three reversed curves like a long S, or, as in this instance, by an S-like sign made of three short straight lines. Below, *Χνουβις ναβις βιεννους ὕδωρ δίψῃ ἄρτος πείνῃ πῦρ ρείγῃ* (for *ρίγῃ*); each of the first three words has a line to itself, and a line is given to each of the following pairs. The meaning is "Chnoubis, bound by enchantment" (if the second and third words are correctly derived from the Hebrew), "water for thirst, bread for hunger, fire for cold."

Plasma. Upright oval, 17 x 12. Obv. flat, rev. very convex.

This stone is here republished to correct in one detail, and to supplement by an illustration, the account of it which was first given in *HTR*, 25 (1932), pp. 365-367 and repeated in *SMA*, p. 182. Those two references give the necessary comment on the religious character of the inscription.

21

56206

Obv. Chnoubis serpent to r., with unusually

large leonine head, which is encircled by a nimbus and fourteen rays. There are also five short projections from the nimbus opposite the lion's muzzle. The snake tail is coiled in two loops.

Rev. In center, the Chnoubis symbol, round which is the name *Χνουβις*; then, round the edge, beginning over the X, *γίγαντοφοντα πανταρηκτωρ βαροφυγα* (the gamma an error for tau), "giant-slayer, all-render, crusher of snakes(?)."

Basalt. Axe-shaped (or pelta-shaped), 32 x 25. Pierced through the middle projection in the plan of the design.

Described, without an illustration, *SMA*, p. 168; the account of the inscription is to be corrected by the reading above. The strange word *βαροφυγα* is discussed *op. cit.*, p. 169.

22

56021

Obv. At l., Imhotep-Asklepios standing to front, his shaven head to r. He wears a long ankle-length tunic (though the torso looks as if it were nude), and an upper garment wound round his l. arm and hips. The l. hand is slightly extended, the r. rests upon a staff round which a snake twines. At r. facing him, Hygieia to front, head to l., in tunic and mantle wound round waist and thighs. Her l. hand holds the tail of a snake which passes upward behind her back and holds its head over a cup in her r. hand.

Rev. Lion-headed Chnoubis serpent to l., head encircled with nimbus from which seven double rays project. In field at l., the usual symbol, at r., *ΧΝΟΒΜΕΩ*, below, two stars and *ΑΒΡΑΔΑΞ*.

Agate. Upright oval, 24 x 18. Flat on both sides; no bevel.

The god's shaven head shows that Asklepios is identified with Imhotep, the wise vizier of King Zoser, who was regarded as the patron of physicians and in late dynastic times was deified as a god of healing. See Erman, *Religion der Ägypter*, pp. 326, 395, 415; W. A. Jayne, *The Healing Gods of*

Ancient Civilizations, pp. 62-64, and the plate opposite p. 32; E. J. and L. Edelstein, *Asclepius*, II, p. 79, note 9; p. 252.

For other representations of Asklepios and Hygieia, see Walters, pl. 22, 1689; Furtwängler, *Beschreibung*, pl. 24, 2679; Le Blant, *750 Inscriptions de pierres gravées* (Mém. Acad. Inscr. 36), pl. 1, 209; King, *Antique Gems and Rings*, copperplates, first group, 4, 42.

23

In private possession at Beirut some years ago.

Obv. Chnoubis snake with youthful human head (to l.) encircled by a nimbus, to the rim of which seven stars are attached. The snake's tail is in two small coils.

Rev. *γίγαντορηκτα ορφυτοβαυλαρους Χμουβι Χνουβα Χνουβαωφι*.

Material unknown. Upright oval, ca. 18 x 13. From a wax impression reversed in printing.

For the human-headed Chnoubis serpent, see *SMA*, Pl. 5, 95-96; also Pl. 19, 354-355, and No. 5 in this article.

24

Unknown location

Obv. Sacred snake (not lion-headed) to l., tail in three coils. On the head and along the neck are seven pairs of slightly diverging rays. The snake rests on a ground line and the coils are shut in at the sides by two uprights with a short horizontal at the top. Round this part of the design runs the inscription *Ιαω σαβαωθ αδωσαι* (l. *αδωναι*) *ωι*. In the exergue is a representation of the uterine symbol with the mouth upward; cf. *SMA*, Pl. 6, 135. At r. of it a large sign like a chi and a short vertical stroke, at l. a character somewhat resembling an F lying on its back.

Rev. Not seen.

Material not reported. Circular, diameter 24.

25

56230

Obv. Climbing lizard. In field *ΠΗΡΑ*, the first two letters at l. and r. of the lizard's thorax, the last two at l. and r. of the tail. The sign

over the lizard's head resembles a broad lambda, but other examples of the type show that it was meant for a crescent with the horns downward.

Rev. Μεγαλὸν Οὐρην, in three lines.

Plasma. Upright oval, 15 x 12.

Described without illustration, in *SMA*, pp. 69-70. The object belongs to a well-marked series of amulets for diseases of the eye. Better specimens from the Seyrig and Michigan collections are shown in *SMA*, Pl. 5, 112-113, and the ancient authorities that explain the type are given on pp. 70-71.

26

56479

Obv. Ouroboros enclosing uterine symbol, over which are the lion-headed Chnoubis to l., facing him, Anubis as mummy, and behind him Osiris as mummy to l., disk over head. The figures of Anubis and Osiris are thin and severely stylized, the torsos triangular in profile view. The uterine symbol is a flattened ovoid with two curving appendages at the top, on which Anubis and Osiris stand, and two short diverging lines slanting downwards from each side. Below are the grating-like wards of the key (see *SMA*, p. 85, Delatte's observation), but no handle is shown. In field, IAW. Round the circumference outside the ouroboros the seven vowels are thrice repeated and followed by IΑ.

Rev. Altar with shallow vessel from which three plant stalks grow. To the one at l. is tied an ibis standing to l. Star in field at upper l., and a reversed curve at l. of ibis and at r. of altar—perhaps to suggest worms or small snakes, the supposed prey of the ibis. Below, Ορωριονθ Ιαω.

Black jasper. Broad upright oval, 42 x 34. Slightly convex on both sides. Remains of suspension loop above.

Like a closely similar stone in the Southesk Collection (*Catalogue*, pl. 14, N 42), this amulet was meant to serve a double purpose. The obv. design is directed to the cure of ills

peculiar to woman (*SMA*, pp. 79-94), the rev. to the relief of digestive troubles (*ibid.*, pp. 51-53); compare *SMA*, Pl. 6, 126, which represents an amulet for sciatica as well as for women's maladies.

This stone, the previously mentioned Southesk and B.M. 56322 (shown in *SMA*, Pl. 6, 136) have in common some striking peculiarities of execution, especially the triangular stylizing of the bodies of Anubis and Osiris, and the carefully cut angular letters with prominent serifs which are used in the field, though not round the margin. I have no doubt that all three came from the same studio and represent the work of a capable artist with a slightly modernistic manner.

27

56543

Obv. Ouroboros enclosing the symbol of the uterus, here of circular outline, with large and distinct key, and streamer-like ligaments extending outward from the top; a shorter pair projects from each side of lower rim. Above, standing on top of the vessel, Isis to front, holding in her l. hand either a small representation of the uterine symbol, or a bowl or vessel of very similar shape. With raised r. hand she touches the head of Harpocrates, who sits to l. on the head of the dwarf god Bes. At r. of Isis an uncertain quadruped (ram or lion?) to l. with an ovoid ornament on head. There are many minute letters round the design just within the ouroboros. Those that can be read make no sense. Outside the ouroboros runs an inscription consisting mainly of combinations of the seven vowels; Ιαω occurs in it at r., χηρα-ωνινοφ at l.

Rev. Above, scarabaeus with head of crowned hawk; below, octopus-like symbol, and ovoid with seven tentacles below. It is another form of the uterine symbol (see *SMA*, p. 90). Round margin and in field many minute letters making no sense.

Haematite. Upright oval, 25 x 22. Mounted as pendant.

The obv. design resembles that of *SMA*, Pl. 6, 139, and of the Southesk gem, pl. 14, N 41. For the reverse, cf. *SMA*, Pl. 6, 139 and especially 140; also the Fouquet haematite published by Barry, though the scarab on its reverse seems to have the head of a dog or a baboon (*Annales du Service des Antiquités d'Égypte*, 7, pp. 241-245 and A on pls. 1 and 2).

28

48954

Obv. Large-headed (not lion-headed) snake to l., seven rays on head. In field, above, six stars; at l. *Iaw*, at r., indistinct letters, perhaps *ζαι* (or *ζαφ*) and *λυ*. Lower, a "character" at each side. At bottom, crudely rendered uterine symbol; the coarsely executed ligaments attached to the bottom might be taken for wings. The key is represented by a faintly cut handle at r. and a row of short teeth below.

Rev. Ass-headed god in kilt standing to l., sword or short staff held upright in r. hand; l. hanging, apparently holding a clumsy indication of the ankh. This may, however, be only a character balancing a common ring-sign at l., under which there is still another indistinct character. Star at upper r.

Haematite. Upright oval, 33 x 21.

The ass-headed Set is occasionally represented on uterine amulets; cf. Southesk pl. 14, N 43, Barry (as cited under our No. 21), pl. 1, 3; see also *SMA*, p. 84.

29

56210

Obv. Cock-headed god standing to front, head to r., nude; whip in raised r. hand, round shield inscribed *IAW* on l. arm. The arms, trunk, and thighs are human, but the legs end in the feet of a bird. The maker doubtless intended to give the god the feet of a cock, to correspond to the head; but it is perhaps worth remarking that there seems to be an old tradition for endowing uncanny beings with bird's feet. I hope to return to this subject elsewhere.

Rev. *αβλαθααααλβα* in five lines. The word is a common palindrome, here with a superfluous alpha, the sixth.

Red jasper. Upright oval, 24 x 17 x 4.

Representations of the cock-headed god with human legs are rare (but compare the next number), and red jasper is little used for this design, green jasper and haematite being the commonest materials; but I see no reason to doubt the antiquity of this stone.

30

56470

Obv. Cock-headed god with human legs and feet standing to front, head to l., hands holding over head a tablet with the word *Iaw*; knee-length tunic girt at waist. Three narrow wings project from each side of the unnaturally elongated trunk. At lower l. an uncertain object perhaps meant for a lizard, though it looks like a grotesque dancing figure with shapeless head. At r. an uncertain object almost entirely lost by the flaking of the stone.

Rev. *αβρασαξ*, with a character at bottom.

Material not noted, probably haematite. Tall narrow oblong with rounded ends, 41 x 14.

Compare B.M. 56497 (our No. 44), where the indistinct head resembles a thick caterpillar, and De Ridder, *Coll. De Clercq, Les pierres gravées*, No. 3456, pl. 29, a lion-headed figure. These are both stomach amulets.

31

56137

Obv. Cock-headed anguipede, head to r., short sword or dagger (not whip) in r. hand, on l. arm narrow oval shield with pointed ends, boss in center. Seven stars in field. The shield and the snake legs are outlined with punctures.

Rev. Three indistinct female figures, the middle one to front, the others in three-quarter position to r. and l. Probably meant for Hecate triformis.

Bronze. Circular, diameter 25. Pierced for suspension.

32

56257

Obv. Harpocrates seated to front on lotus capsule with two buds; r. hand raised, palm out, l. holds flail, which is here so treated as to resemble a crook. Round head seven double rays intersected by a nimbus. In field at r. the first four vowels, the others at l.

Rev. ἀρχενχρονφι βριντατηνωφρι βρισκυλμα βρισκυλμω ιαηω λαιλαμψ σεμεσιλαμψ δεξ χάριν τη Ζυροναι.

Green jasper. Upright oval, 19 x 14.

Several elements of the reverse inscription have been discussed in *SMA*, pp. 204-205, and only brief explanations will be offered here. The first unit, which is incorrectly written for ἀρπονχρονφι, combines the names of Horus-Harpocrates and Chnum, who was identified with the Greek Agathos Daimon. The second seems to be especially associated with Chnum. The third and fourth have no known meaning and are probably jargon of the kind often introduced into magical spells. The fifth is probably a variant of Ιαω; cf. No. 37, rev. The sixth and seventh occur chiefly with solar divinities. The last four words are a brief prayer, unfortunately corrupt. The word δεξ should perhaps be read δες, and in any event it must be a misreading of δός in the copy used by the engraver. The name of the woman who prays for "favor" is not known elsewhere and may be corrupt.

33

56283

Obv. Harpocrates seated to r. on lotus capsule in a papyrus raft, on each upturned end of which a crowned hawk perches. The young god has a disk on his head, and with both hands is holding a clarinet-like instrument; but the mouthpiece is not between his lips, which are clearly seen below it. Perhaps, as an expert on ancient music has suggested to me, the god has removed the instrument from his lips in preparation for a phrase of song.

Rev. Round the margin, fourteen signs including a Greek delta and two possible omegas;

the rest meaningless characters or else cryptographic signs. Within these, a spiral inscription reading inwards, δός χάριν Θεανούτι πρὸς Σεραπάμωνα, "grant Theanous favor in the eyes of Serapammon." Both names are several times attested in Egyptian papyri. Theanous is an Egyptian variant of Theano.

Bloodstone. Transverse oval, 25 x 21.

The stone was briefly described, without an illustration, in *SMA*, p. 48. See the next number.

34

B.M. Catalogue of Gems, No. 358.

This gem, published by Walters without an illustration, is a fragment of a scarab from Tharros in Sardinia, and consequently much older than the amulets treated here; but like other Tharros gems it is a valuable link between dynastic amulets and those of the Roman period. In the following description I venture to differ from Walters' account in some details; and it is to be observed that he describes the stone from an impression, saying that Harpocrates faces l.

Obv. Harpocrates seated to r. on lotus, between two winged uraeus snakes; beneath each of them is a bud of papyrus or lotus. The upper part of the design was broken off, probably as the result of an unsuccessful attempt to pierce the scarab longitudinally; but the end of a flail shows behind the child's shoulder, and he probably held his finger towards his mouth, for the angle of his elbow shows just above his knees; compare *SMA*, Pl. 10, 203, 204, 208. I can see nothing on this fragment to warrant Walters' statement that Harpocrates was playing the flute.

Rev. plain.

Green jasper. Fragment of scarab, 17 x 13.

35

56248

Obv. Composite design of Harpocrates and cynocephalus baboon; Harpocrates sits to l., r. hand raised towards mouth, l. not shown. Disk on head, star in front, crescent behind. The child's trunk is prolonged downwards

to make the head and trunk of the baboon which is upside down in relation to Harpocrates. The baboon has a disk over his head; his lifted forepaws serve as Harpocrates' legs, and his tail springs from the god's shoulders.

Rev. plain.

Green jasper. Upright oval, 14 x 11.

36

56292

Obv. Design as in preceding number except that Harpocrates faces r. and the star and crescent are wanting.

Rev. plain.

Green jasper. Upright oval, 16 x 11.

37

56527

Obv. Ouroboros enclosing in descending rows three scarabaei, three crowned hawks, three goats, three crocodiles, three cobras. The beetles have their heads upwards, the other groups are turned to the l. side. Outside the ouroboros, the seven vowels in diminishing sequence, *αεηιονω*, *εηιονω*, etc. to *ω* alone; but the fourth and fifth groups have been worn away, leaving only the bottoms of a few letters.

Rev. *Ιω ιηω αβρασαξ* in four lines.

Material not noted. Upright oval, 27 x 19.

The animal triads, which usually appear with Harpocrates, seem here to serve as symbols for him, though his figure is not shown; so also on B. M. 54276. See *SMA*, pp. 142-143.

38

56252

Obv. L. to r. (1), snake rising from its coil; (2) cock-headed anguipede to r., whip in l. hand, shield on r. arm; (3) Harpocrates seated to l. on lotus capsule, r. hand raised towards face, l. holding flail; (4) Anubis, nude but for kilt, standing to l. with tall scepter in r. hand, object resembling the outline of an hourglass in l.; (5) Chnoubis serpent to l., seven rays round head. Along upper margin, three stars and crescent moon.

Rev. In five lines, meaningless inscription, probably badly copied from a badly written original. At the end of the first and at the beginning of the second line there should probably have been *λαιλαμ* following which stands *σεμεσειλαμ*; (for *σεμεσειλαμ*); for these words, see *SMA*, p. 187. The rest of the first three lines, though legible, gives no known elements, and the last two lines are so abraded as to leave no significant remains. Round the beveled edge are nineteen characters, mostly modifications of Greek letters.

Haematite. Transverse rectangle, 33 x 16.

39

56396

Obv. Figure with human head, apparently female, to l., and body of a scorpion with legs at sides and also a pair of thin insect-like legs supporting the body from below. These are made of a succession of short joints like those in a scorpion's tail. The head is apparently covered by a headcloth, unless the engraver wished to indicate long hair falling to the shoulders and covering the ear. Over the head is a disk with two horn-like projections. Each hand grasps a cobra; the tails of the snakes meet and cross below. The design is enclosed by a deep groove, not an ouroboros.

Rev. Above, an alpha, below, two uncertain signs. The first resembles an omega, but one of the earlier horseshoe form, not that used on amulets of this period. The second consists of a loop and a wavy tail, and slightly resembles a *g* of ordinary English handwriting. The inscription is almost certainly later than the work on the obverse and may be modern.

Green jasper shaded with brown. Upright oval, 21 x 15.

Various Egyptian divinities are sometimes represented standing on a double serpent, the two heads of which are grasped by the extended hands of the god or goddess; e. g. Sekhet (Sekhmet), Budge, *Gods*, I, p. 514; Lanzone, pl. 363, 4. Isis is seated with the

infant Horus over a double serpent, Lanzone, pl. 310, 3. Numerous minor deities of the underworld are so shown.

The figure may be a late conception of the scorpion-goddess Serqet (Selket), who is shown in Budge, *Gods*, II, p. 377. *SMA*, p. 159 *ad fin.* is to be corrected by the description above. A somewhat similar figure is to be seen on the reverse of the Metternich stele, second row, fourth from left.

40

56016

Obv. Compound figure standing to front. The head, which is that of a jackal, is turned to l.; the body is that of a scarabaeus. Two wings project from the shoulders and two from the waist, and a bird tail slants downward at r. Four arms, the upper pair holding tall scepters, the lower, attached at the hips, hold a dagger and a flail. The legs seem to be human. Under the feet, ouroboros making a cartouche which encloses the word *IAW*.

Rev. plain.

Haematite. Upright oval, 17 x 12.

Compare the beetle-bodied figure in *SMA*, Pl. 3, 66 (rev.), and pp. 159-160, 264.

41

56015

Obv. Composite figure with head and neck of a cobra, the body of a scarabaeus, to the lower part of which two wings are attached on each side, and the legs and feet of a man. There is a disk over the cobra's head. The figure has four arms. The upper pair hold tall scepters with trident-like tops. The lower r. hand holds a dagger, the lower l. an uncertain object, perhaps a sistrum, perhaps a knife with broad, triangular blade; cf. the knives held by the god on the reverse of the Metternich stele, and also our No. 42.

Rev. *σουμαρθα φηλιξ αβραξας*.

Lapis lazuli. Upright oval, 18 x 15.

The inscription on the reverse is noteworthy as introducing a Latin word (*felix*) in transliteration, and as supplying an instance of the spelling *αβραξας*, the only one,

so far as I know, that has been found on an amulet; it was apparently the form better known to the Latin Christian writers (Iren. *adv. haer.* 1.19.4; Hier. *Epist.* 75.3.1; *Comm. in Amos*, PL 25, 1018 D; *contra Lucif.* 23, PL 23.178 A; Ps.-Tertull. *adv. omn. haer.* 1). The word *σουμαρθα* or *σουμαρτα* occurs on other amulets and in magical papyri. Since forms of *φυλάσσω*, "guard," are common on amulets, one is tempted to suggest a connection between *σουμαρθα* and the Hebrew radical *šmr*, "guard," "watch over." Compare the reverse inscription of No. 45.

42

56012

Obv. Pantheos of elaborate type to front, feet to r. The face is a staring mask, with four indistinct heads of animals projecting from each side. Above, an elaborate headdress, with similar animal heads at each side, supported by horizontal horns (or snakes). There are four wings and four arms, the upper pair of which hold knives, while cobras, short scepters, and other indistinct symbols project upwards from the wrists and upper parts of the arms. Somewhat similar objects are to be seen in the field at each side of the headdress. The lower r. hand holds a scorpion by the tail, and also, apparently, a flail, the staff of which passes behind the back; the l. hand holds a lion by the tail. The figure is ithyphallic and has the tail of a bird. There are tufts on the knees, and the feet are in the form of jackals' heads. Under the feet an ouroboros forms a long cartouche enclosing scarab, hawk, goat, jackal, lion, crocodile, and cobra.

Rev. The long *ιαεω*—palindrome (*SMA*, p. 204) followed by the words *δοται* (l. *δότε*) *χάριν* 'Ηρωνίλλα πρὸς πάντας, "Give Heronilla favor in the eyes of all."

Lapis lazuli set in gold. Upright rectangle, 27 x 22; broad bevel, rev. only 21 x 17.

More than any amuletic "pantheos" known to me, this figure resembles that which dominates the reverse of the Metternich stele

(Budge, *Gods*, II, p. 273); Budge takes it to be the aged sun-god. The face, however, is less human than the Metternich figure's, and there are other differences of minor importance.

43

56398

Obv. Ouroboros enclosing pantheos similar in many respects to the foregoing example, but differing in the following points. The head-dress is a simple three pronged ornament like a psi without curves. The upper pair of hands hold short scepters with oblique projections near the point, suggesting that the engraver had in mind stylized thunderbolts. Of the lower pair the r. hand holds a balance, the l. a dagger. In the field, the common magical word *ακραμμαχαμαρει*, arranged with the first letter at the l. side of the head, the second at r., and so on in descending columns to ε and ι which are placed close to the feet at l. and r. At bottom, fifteen characters (including two reversed epsilons) in two lines.

Rev. Four and a half lines of characters, some Greek letters, others adapted from Greek letters. Following the last character, the inscription *ανεβωθιαβαθα · βαιθωβενα · αχεναχελιαζα · μερρειξα · βαρβαρωθ · τερχνα · φονει · αειαδδενζαχρεια*. It is to be noted that the units are pronounceable (see *SMA*, pp. 186-190), and are carefully separated with high points. The first two, taken together, make a palindrome with the second theta as central letter. On the bevel, *αφθυχωβριαννπηθηλαμψιχνηθυθηχηρι (zac) ωαχωβιαφθθυονχυθηχηθριανψιχαειθηση*.

Green jasper, set in ring. Upright oval, 27 x 21.

44

56497

Obv. Extremely crude figure with non-human head perhaps meant for that of a lion (cf. *SMA*, Pl. 5, 102, Pl. 11, 229 and 232), but more like a thick spiny caterpillar (cf. *SMA*, Pl. 9, 185, which, like this, is a digestive

amulet). The body is clothed in a tunic belted at the waist and reaching to the knees. The raised hands hold a *tabula ansata* on which an A is faintly visible. The inscription may have been *IAW*, but the other letters, if there were any, have been worn away. Three wings like large feathers project outward from each side of the waist and hips. The legs are mere pegs crossed by short horizontal lines, possibly intended to indicate greaves or leggings (cf. *SMA*, Pl. 6, 124). At each side below is a palm frond.

Rev. *στόμαχε πέπτε*, "stomach, digest!", arranged in five lines.

Haematite. Tall, narrow oval, 43 x 19.

45

56191

Obv. Demon standing to front dressed in a clinging tunic reaching from neck to knees; hands held together on chest. Two short wings project outward from the shoulders, two from the hips. The figure has the head and neck of a vulture with three short projections above it. From the r. shoulder rise the neck and head of a jackal crowned with a disk, from the l. shoulder the neck and head of an ibis with three short diverging points above it.

Rev. *βιχω βιχω βεν βεν χωβι χωβι βεν σουμαρτα*. For the last word, see No. 41. The rest is a fairly typical "babbling" legend (*SMA*, pp. 69, 191).

Haematite. Upright oval, 23 x 19.

Published by King, *Antique Gems and Rings*, II, 47, with pl. 9, 2 (woodcut from drawing).

46

56552

Obv. Winged frog sitting to l. on back of monster with body and feet of a crocodile, head and neck of a snake, and tail in form of a hawk's head and neck. The creature rests on a low pedestal with crossing lines, some vertical, some diagonal.

Rev. *ιαρβαθαγιραμηφιβαωχημew*.

Green jasper mottled with brownish yellow.
Transverse oval, 26 x 22.

The Southesk Collection had three specimens, varying in details, of this rare design, *Catalogue*, Nos. N 78-80, the first two illustrated in pl. 15. The frog seems to have been a symbol of fertility and of renewed life (*SMA*, pp. 205, 243). The inscription on the reverse, which is found on the Southesk stones also, is said to be proper for invocations to the sun (references in *SMA*, p. 205).

47

56455

Obv. Ouroboros enclosing well-cut scarabaeus almost natural size (25 mm. long).

Rev. $\epsilon\pi\epsilon\kappa\alpha\lambda\omicron\mu\mid\epsilon\sigma\epsilon\mu\epsilon\gamma\alpha\lambda\omicron\delta\mid\omicron\acute{\xi}\epsilon\omicron\upsilon\omicron\mu\alpha\tau\alpha\epsilon\mid\theta\eta\kappa\alpha\tau\epsilon\text{-}$
 $\sigma\alpha\rho\omega\mid\delta\lambda\omicron\kappa\alpha\iota\pi\upsilon\eta\epsilon\omicron\mu\mid\epsilon\theta\pi\iota\upsilon\chi\epsilon\upsilon\omicron\pi\upsilon\mid\omicron\upsilon\omicron\upsilon\omicron\iota\theta\sigma\iota\text{-}$
 $\sigma\omega\mid\tau\mu\sigma\lambda\omicron\upsilon\omicron\mu\alpha\tau\mid\omicron\epsilon\theta\upsilon\omicron\kappa\epsilon\mu.$

After the invocation, $\epsilon\pi\kappa\alpha\lambda\omicron\upsilon\mu\alpha\iota\ \sigma\epsilon,\ \mu\epsilon\gamma\alpha\text{-}$
 $\lambda\omicron\delta\omicron\acute{\xi}\epsilon$, the inscription at first sight seems to be mere jargon. But it is actually an almost incredible garbling of a text which probably gave good sense throughout. So far as the original copy can be reconstructed, it may have been something like the following: after the invocation, $\omicron\delta\ \acute{\omicron}\nu\acute{\omicron}\mu\alpha\tau\alpha\ \acute{\epsilon}\theta\eta\kappa\alpha\ \tau\eta\ \sigma\omicron\rho\hat{\omega} . . . \kappa\alpha\iota$
 $\pi\omicron\iota\epsilon\iota\ \mu\epsilon\ \epsilon\pi\iota\upsilon\chi\epsilon\iota\acute{\nu}\ \acute{\omicron}\pi\omicron\iota\acute{\omicron}\omega\iota\acute{\nu}\ \acute{\alpha}\nu\ \omicron\upsilon\acute{\nu}\ \theta\epsilon\lambda\acute{\eta}\sigma\omega . . . \mu\acute{\epsilon}\gamma\alpha$
 $\acute{\omicron}\nu\omicron\mu\alpha . . .$ The word $\sigma\omicron\rho\hat{\omega}$ is doubtful because it is not certain whether the engraver intended to write ρ or κ . If $\sigma\omicron\rho\hat{\omega}$ is right, the text refers to the well-known practice of depositing magical spells in a tomb. The object, though curious, is unimportant except as it illustrates by an extreme instance, how an intelligible text could be mangled by an ignorant engraver.

Green jasper. Upright oval, 47 x 36.

In *IG*, XIV, 2413, 14, Kaibel republished an inscription closely resembling this from a much older transcript by Amati (1820). It is possible that the stone is the same as the B.M. specimen, for that republished by Kaibel has a scarabaeus on the obverse, and the differences in the text can be explained as due to faulty reading. Further, the stone origin-

ally published by Amati passed into the collection of Count Blacas, and it is known that many of his gems were acquired by the British Museum (Walters, *Catalogue*, Introd. p. xi). However, the Blacas stone is described as *diaspro sanguigno*, which a good dictionary explains as *bloodstone*; and I think there are no red spots on the B.M. green jasper.

48

56277

Amulet in the form of a scarabaeus with extended wings.

Obv. not inscribed. No illustration available.

Rev. Under r. wing $\alpha\beta\lambda\alpha\nu\alpha\theta\alpha\nu\alpha\lambda\beta\alpha$ in three lines. Under l. wing $\alpha\kappa\rho\alpha\mu\mu\alpha\chi\alpha\mu\alpha\rho\epsilon$ in four lines. Both are very common magical words, the former a palindrome. Under the body, in eight lines, $\epsilon\theta\epsilon\nu\tau\epsilon\beta\epsilon\rho\nu\epsilon\chi\upsilon\rho\tau\omicron\nu\ \omicron\pi\rho\sigma\tau\upsilon\phi\chi\psi\ \omicron\nu\epsilon\text{-}$
 $\sigma\beta\epsilon\rho\iota\nu\iota\omicron\ \mu\acute{\epsilon}\gamma\alpha\varsigma\ \acute{\epsilon}\nu\ \omicron\upsilon\acute{\rho}\alpha\nu\hat{\omega}\ \acute{\alpha}\mu\eta\acute{\nu}\ \acute{\alpha}\mu\eta\acute{\nu}.$ Note the alphabetic sequence $\omicron\text{-}\psi$ in the middle of the inscription. $\mu\acute{\epsilon}\gamma\alpha\varsigma\ \acute{\epsilon}\nu\ \omicron\upsilon\acute{\rho}\alpha\nu\hat{\omega}$ has a biblical sound; cf. Ps. 108, 4, $\mu\acute{\epsilon}\gamma\alpha\ \acute{\epsilon}\pi\acute{\alpha}\nu\omega\ \tau\acute{\omega}\nu\ \omicron\upsilon\acute{\rho}\alpha\nu\hat{\omega}\nu$
 $\tau\acute{\omicron}\ \acute{\epsilon}\lambda\epsilon\acute{\omicron}\varsigma\ \sigma\omicron\nu.$

Lapis lazuli. *Ca.* 35 x 20.

49

56500

Obv. Crab. Star at lower l., and below, IAW , upside down with reference to the crab.

Rev. $\text{Map\acute{\iota}\alpha}$.

Mottled jasper, red and yellow. Transverse oval, 18 x 14.

A similar stone was published and discussed by A. Delatte, *Musée Belge*, 18, 68. That piece, which belongs to the National Museum in Athens, is smaller, but the inscriptions are the same. The occurrence of the name $\text{Map\acute{\iota}\alpha}$ on two similar pieces lends greater probability to Delatte's suggestion that Mary, as the Celestial Virgin, or the Virgin of Light, was associated in Gnostic circles with the moon, whose "house" is the zodiacal sign of the Crab.

50

56473

Obv. $\text{I}\omega\theta\ \sigma\alpha\beta\alpha\theta\ \alpha\delta\omega\nu\alpha\epsilon\iota$, a line to each word; one cross potent above, three below.

Rev. $\delta \omega \nu$, with cross potent above and below. Bronze. Oblong pendant, 42 x 28, without the suspension loop.

For the Hebrew divine names on the obverse, "JHVH of hosts, Lord," see *SMA*, p. 30; for $\delta \omega \nu$, *ibid.*, pp. 109, 225; and for the addition of theta to $\text{Ia}\omega$, which is common in magical texts, see von Baudissin, *Studien zur Semitischen Religionsgeschichte*, I, pp. 194-195.

51

56324

Obv.

λιμός σε ἔσπιρε
 ν ἄηρ ἐθέρισεν φλ
 ἑψ <σ>ε κατέφαγεν τί
 ὡς λύκος μασᾶσε τί
 ὡς κορκόδυλλος κα
 τὰ πίννις τί ὡς λέω
 ν ὀρωχίς τί ὡς ταῦρ
 ος κερατίζις τί ὡς δ
 ράκων εἰλίσσι τί ὦ
 ς παρᾶος κυμᾶσε

Below, in center, upper part of a human figure, apparently female, both hands raised, nimbus round head; on each side a lion, the one on the r. side indistinct.

"Hunger sowed you, air harvested you, vein devoured you. Why do you munch like a wolf, why do you devour like a crocodile, why do you bite (or, "roar"?) like a lion, why do you gore like a bull, why do you coil like a serpent, why do you lie down like a tame creature?"

Critical notes and comment at the end of this entry.

Rev.

ἵππος, μῦλος,
 εἶβις, ἐθυῖα κο
 λῆ ἀνδρός, στρουθ
 οκάμηλος Ἀπόλλω
 .ιοσοτοιδηενς
 δουλιασουςατερ
 πανλινας πανιο
 ωσσηη. . . ηο. ηι

Below, indistinct design of a four-footed animal treading on a snake. "Horse, mule, ibis, phallus, ostrich, Apollo"; the rest unintelligible, though the last line but one seems to contain the name Paulina, and in the preceding line it is just possible that *δούλη σου*, "thy slave" was in the engraver's copy.

Bronze pendant with suspension loop. Height over all 54; without loop, 40 x 29.

The reading of the inscriptions is very difficult not only because of the minute and crowded writing but also because several letters are not carefully distinguished. The tongue of epsilon is often omitted, and both sigma and epsilon are then represented by a shallow curve. Pi and mu are much alike, also eta and nu. Omicron is narrow, often pointed at top and bottom, and sometimes hard to distinguish from a thick iota. The usual vulgar faults in orthography are present in exaggerated form, and the substance of the texts is so trivial, not to say silly, that a reader scarcely knows what to expect.

The obverse text begins with a charm which might be referred to the form called by Heim, *Incantamenta magica*, p. 495 (*Jahrb. f. Philol.*, XIX), *historiola*, a short narrative, often of a childish sort, which was believed to be an effective remedy against certain ills. It differs from most of Heim's *historiolae* in that it seems to be addressed to the disease itself, just as is the remainder of the text from $\tau\acute{\iota}$ (line 3) to the end. This latter part is another version of an incantation known from several sources of Byzantine date. Drexler's masterly treatment of it in *Philol.*, 58 (1899), pp. 594-607 makes discussion of it here unnecessary. It may be observed that the version on the B.M. pendant is fuller than any hitherto published, and differs from them in another respect, namely, that the clauses are questions introduced by $\tau\acute{\iota}$, not statements. The following critical notes are required by the corrupt character of the language.

1. Read ἔσπειρεν. 2. The pendant has ΑΛΙΡ; Η was wrongly read as Ν, which, carelessly incised, gave ΑΙ. 3. Haplography due to the s sound in Υ. 4. μασᾶσε, for μασᾶσαι (read by H. C. Youtie), like κυμᾶσε (κοιμᾶσαι) in line 10, has the late full ending instead of the contract forms μασᾶ, κοιμᾶ. (Kühner-Blass, II, 69 Anm. 5). 5. Another of the numerous vulgar spellings of κροκόδιλος; see LSJ. 6. Read καταπίνεις. 7. ορωχis accurately represents the appearance of this word, though the ο is exceptionally narrow. The Byzantine amulets that preserve similar texts usually read βρυχᾶσαι, "roar," after λέων, and it is probable that the first letter was meant for β, since in both papyri and inscriptions of Roman times that letter was sometimes represented by an ellipse or a narrow oblong; see the table in Thompson, *Palaeography*, p. 192; Schubart, *Palaeographie*, p. 72, fig. 44; and Larfeld, *Handbuch der griech. Epigraphik*, II, pp. 488, 506. But there are still difficulties. If we suppose ω to be merely a blunder for ν, βρύχεις must be referred to βρύκω (βρύχω), "bite, gnash the teeth, devour." βρώχεις seems to be impossible; one could perhaps imagine βρώχω to be a byform of βρόχω, "gulp down," "swallow," but the verb is not attested in the present system. Besides, it is used of swallowing liquids, and hence is less to be expected in describing a characteristic action of lions. 9. Read ειλίσσει. 10. Read πρᾶος. This is an interesting instance of vocalic anaptyxis, an alpha being developed as a sort of glide sound between the mute and the liquid. Epsilon and iota so developed are attested in papyri (Mayser, *Gram.*, I, p. 155), and it is probably only by chance that anaptyxis of alpha has not been observed elsewhere.

The first four lines of the reverse inscription are a charm consisting of the names of things hostile to the Evil Eye. See *SMA*, p. 215 and the authorities there cited; further discussion here is unnecessary. Read μούλος,

ἰβις, εὐθεία κωλή, Ἀπόλλων. I can add nothing to the statement above concerning the last lines.

This account of B.M. 56324 supersedes that in *SMA*, p. 217, which was based upon a reading of the original, but under unsatisfactory conditions of lighting. The notes made then have now been supplemented and corrected with the help of excellent casts, which I owe to the courtesy of the Museum and the skill of its technician.

52

56269

Obv. Person standing to front on back of crocodile swimming to r. The figure is clothed in a long tunic reaching from neck to ankles. The r. hand holds a large fish over the head, the l. hand is raised, palm outward. Nimbus round the head. The face is indistinct, apparently beardless, though this is not certain. The strongly muscled arms and the absence of definite indication of breasts seem to show that the figure is male, but the length of the tunic may be more appropriate for a woman.

Rev. plain.

Dark green plasma with reddish spots. Upright oval, 14 x 12.

The stone presents an interesting combination of pagan and Christian elements. Several Egyptian gods, among them Isis, Ptah-Seker, Khonsu, and Harpocrates, are sometimes represented as standing or sitting on the back of a crocodile. There are at least six such figures on the Metternich stele alone. On the other hand the nimbus, though sometimes given to pagan deities, is in general an attribute of Christian saints, the position of the l. hand suggests benediction, and the fish is a well-known Christian symbol; for it is hardly likely that the goddess Ḥatmeḥit, on or over whose head a fish is fixed, would be represented at the period of this amulet. She is the female counterpart of the Ram-god of Mendes (Budge, *Gods*, II, p. 64; Lane, pl. 212, 1-3).

If a female Christian saint is meant, it is doubtless Theodora of Alexandria. According to the fabulous legend, she sought to make amends for a sin by entering a monastery disguised as a man. There her austerities attracted the attention of the monks, and once the abbot, desiring to test her sanctity, gave her a dangerous commission. He ordered her to bring a vessel of water from a lake near by, in which there was a crocodile so large and fierce that the prefect of the district had stationed soldiers to warn all travelers away from the water. Theodora disregarded the warning and went to the waterside, whereupon the monster took her upon his back and carried her to the middle of the lake. There she filled her vessel and then returned in the same way. On reaching the shore she said to the crocodile, "Never devour man again," and the creature died immediately.

I have given the story from a Greek hagiographic manuscript of the fourteenth century in the Library of the University of Michigan (No. 50, fol. 138-139). The text is a crude popular narrative, certainly closer to the original form of the legend than the padded version of Symeon Metaphrastes (*PG*, 115, 676).

A saint called Euphemia, cast by her persecutors into a tank infested by savage creatures (crocodiles ?) was carried by them above the water and set on the bank (Budge, *Book of Saints of the Ethiopian Church*, III, p. 878).

Among the male riders of crocodiles, the famous Pachomius, the organizer of Egyptian monasticism, is the most likely to have been represented on a crocodile, for it was said that whenever he had to cross a river, a crocodile would carry him and set him ashore wherever he wished (*PL*, 73, 241, a version of a Greek life of unknown authorship). But the longer version of the *Historia Lausiaca*, which Dom Cuthbert Butler holds to be interpolated with material from the

Historia Monachorum, relates that a certain Hellen, wishing to bring a priest to perform his office, was carried over by an obliging crocodile (*PG*, 34, 1161).

Lucian (*Philops.* 60-61) mentions crocodile riding as a feat of an Egyptian magician, another instance of the manner in which the iconography of Egyptian gods has influenced both pagan and Christian tales of wonder.

53

56469

Obv. At r., woman seated to l. with infant lying on her knees; the ankh, or sign of life is seen just beyond and slightly over her head, and she is probably supposed to be holding it up. Facing her, man in long tunic to knees or slightly below. At l., tree under which an animal, probably meant for a lamb, looks back towards the group. The scene seems to be a crude representation of the Nativity.

Rev. Large ankh, or crux ansata, with εἰς θεός written downwards at r., ἐν οὐρανῷ at l. For this inscription, see E. Peterson, *Heis Theos*, pp. 261 f.

Brown stone, not identified. Broad upright oval, 33 x 29. Chipped at top of obverse. The work is not a true intaglio, the design being merely outlined with incisions. For the technique, compare *SMA*, Pl. 18, 332. Described, without illustration, by Budge, *Amulets and Superstitions*, pp. 129-130.

54

56231

Obv. Extremely crude representation of the crucifixion, without, however, any effort to show the cross to which the figure of Christ is supposed to be fixed. The head is encircled with a nimbus from which three rays project slightly; a fourth would be concealed by the neck. Below, two mourning figures, r. and l. Above, three or four indistinct characters.

Rev. Three lines of non-Greek characters. On bevel a few Greek vowels and indistinct characters.

Red jasper with vertical band of yellow. Upright oval, 23 x 18.

55

56192

Obv. A kind of man-headed cross. The head, facing front, and the feet are human, and the lower part of the body may be so also, though it is so closely swathed as to resemble a mere pillar. Instead of arms there is only a heavy horizontal bar with slight vertical projections at the ends. The face is beardless; two locks of hair project like short horns. Underneath the figure is the common magical word *νχαροπληξ*. Round the edge runs an inscription beginning *υβραουεχμ*, continuing with various permutations of the vowels, including *Ιαω*, and ending with *ρωθ*. Several other vowels within this inscription, above and at upper l.

Rev. *αιουηωι*.

Chalcedony, set as pendant. Upright oval, *ca.* 25 x 21. Both sides very convex.

Previously published, with fairly good drawings, by King, *Gnostics*, pl. C 1. A bronze pendant published in *SMA*, Pl. 16, 318 shows the bust of Christ replacing the upper projection of the cross. The B.M. chalcedony may have been designed under Christian or Gnostic influence.

56

Cabinet des Médailles, 2262.

An Arabic seal, introduced here merely because it suggests the explanation of the following number. According to Chabouillet's description (*Cat. des camées et pierres gravées*), it represents Solomon, crowned, seated on his throne in the Oriental fashion. Above his head, two winged jinns; at r. the hoopoe, which served as his messenger; at foot of throne on each side two men; in front, two animals (lions?). At l. the name "Soliman," at r., "son of David." Round the design, serving as its frame, the Throne Verse of the Koran (Sur. 2, 256).

Rev. plain.

Carnelian. Rectangle, 40 x 38.

57

56262

Obv. Person seated on a throne in the eastern fashion, head with semicircular nimbus to l., r. hand touching the topmost knob of a tall support of the throne. From l. approaches a procession of five figures, each of the last four resting a hand on the shoulder of the person before him. The man nearest the throne is taller than the others, has a semicircular nimbus, and rests both hands on a tall staff. From r. come three winged figures (jinns?); the first, who is tallest, holds a tall staff in both hands. The first and second figures have crescent-like horns, and probably the third also, though a break in the surface leaves this doubtful.

Above this scene two parallel lines cross the surface from side to side, and over them three birds fly towards the center from r., two from l.

Under the main design two horizontal lines enclose several characters, some of which resemble Greek letters, and there were more in the exergue, which is badly damaged by a deep chip. There are also four over the men at l. of the throne. Three of them could be read as *ΙΞΛ*, the fourth is an equal-armed cross potent. Among the birds at the top, over the throne, and behind the two processions, are small disks.

Rev. plain.

Carnelian. Transverse oval, 28 x 21.

The obviously oriental subject seems to be explained, by comparison with the preceding number, as Solomon enthroned receiving the homage of men and of the winged and horned jinns. Solomon's hoopoe may have suggested the flight of birds above.

It may be noted in passing that not only the Semitic demons of the waste (*se'irim* and *shedim*) were horned (Scheftelowitz in *ARW*, 15 [1912], p. 460), but there is also some evidence that certain angels had horns. In his ascension to the seventh heaven Moses saw the angel Zagzagel, the Prince of the Torah and of Wisdom, wearing horns of

glory (Ginzberg, *Legends of the Jews*, II, p. 309). S. A. Cook, *Religion of Ancient Palestine in the Light of Archaeology* (1930), refers to "the horns of Gabriel and other angels," citing the authority of Gaster; but the reference (p. 29, note 4) is wrong and I have not found the passage.

- 58 Museum of Fine Arts, Boston, 03.1008
Obv. Ship moving to l., from prow of which Jonah throws himself head first into the sea; the steersman raises his hands in wonder or perhaps in prayer, while a sea-monster swims towards Jonah. At r. and lower, Jonah is represented sitting under a tree resting his hands on his staff. At l., on the same level as the ship, he is shown again facing r., his hands raised as if praying or preaching.
Rev. plain.
Sard, set in a ring. Transverse oval, ca. 17 x 15.

This stone or a replica of it (see the next number) was first published by Garrucci. For references see *HTR* 41 (1948), p. 32 (note 7), and *SMA*, p. 312 (No. 347).

- 59 In private possession in England
Obv. As in No. 58, of which it is a replica.
Rev. plain.
Material not noted.
Reproduced from a wax impression with the film reversed in printing.

- 60 Cabinet des Médailles, 2221.
Obv. Warrior in military tunic, kilt, and boots, standing to front, head to l., a trophy on his head. In each hand he grasps a snake, which rears its head towards the trophy. Inscription at each side. Beginning from lower l. outside, ρωζομαληδυχη ηχωδομαρυνο νενονδη; from lower r. inside, μερμονοχωαηο υπερεμεωργομα δηγνσσωρ.
Rev. αιεων αιεηαι οεων αοεω.
Red jasper. Broad upright oblong with rounded corners, 35 x 27.
From an impression, the film reversed in printing.

Illustration in Chiflet, pl. 23, 94; Matter, *Hist. critique du Gnosticisme* (1828), pl. 8, 7, perhaps after Chiflet's engraving rather than the original. Described in Chabouillet's *Catalogue*, and, more briefly, in Babelon, *Guide*.

- 61 56026
Obv. Same design as No. 60, but copied from Chiflet's engraving, with all the errors and additional ones. They are sufficiently described in the discussion of these copies which precedes the catalogue (above p. 305).
Rev. Same as No. 60.
Sard. Upright oval, 27 x 21.

- 62 56360
Obv. Described above, p. 305. Probably copied from Chiflet's pl. 19, 78 or the original which it represents. The engraving in Chiflet represents the two outermost of the four dancing figures as winged. The wings may have been added by Chiflet's draftsman, possibly because he misunderstood two lines that curve upward behind the figures, but do not actually touch them. In any event the present object is not the original of Chiflet's amulet, which had a reverse design different from that of the London stone.
Rev. Same as obverse of Nos. 60 and 61; discussed above p. 305.
Crimson jasper, set in ring with pivoted bezel.
Upright oval, 30 x 21.

- 63 Kunsthistorisches Museum, Vienna, IX 1230.
Obv. Above, ouroboros enclosing seven characters of which five are Greek letters, ζ, ε, (in two forms, square and roundbacked), π, υ; also a sign that can be taken as lambda lying on its side, and another that is a common magical character. At each side of the ouroboros are two eight-spoked characters of the ring-sign class, but with short cross strokes instead of circlets at the ends of the spokes. Below, an inscription in eleven lines. In reproducing it I have indicated the lines

only by rules, in order to show by spaces the magical words of which, with the exception of the last two, it is entirely composed.

αγω σασαω αδωνε| σεμεσειλαμ αβρασ| σξ ξυρ-
ρατη ακραμμα|κραμμακαμαρι σεσε|γγενβαλφαρανγη
σ|εμεσειλαμ ωβλημ|λενιαμβων αρουαντα Μιχαηλ
α|μοραραχθι | φυλαξετε Μαι|ανω

In line 1 ΑΓΩ may be a mistake in copying for ΑΙΩ, and that, in turn, a disguised writing of ΙΑΩ, since the next two words were obviously meant to be σαβαω (often written in magical inscriptions for σαβαωθ) αδωναι. Lines 2-3: the word should be αβρασ-σαξ. ξυρρατη has not been noted elsewhere. Lines 3-4: the second κραμμα was repeated by an oversight; the letter immediately after it is usually chi, not kappa. Line 5: the word is usually σεσεγγενβαρφαραγγης. Lines 6-7: perhaps a garbled copy of ωρθμενχινιαμβων, a word found on several amulets that represent a scorpion; cf. *SMA*, p. 77. Line 9: the second ρα is a dittography. Line 10: error for φυλάξατε.

Rev. Inscription in three columns of thirteen, fourteen and fifteen lines, of which the first is οπιεσωτουαρ, the second Ιαω ρεωη αφον. The parts of the second line are spaced about as indicated, and from the third line on there are three distinct columns, chiefly permutations of the vowels by threes, but a few consonants are introduced; it is not worth reproducing in type, since there is no recognizable word except Ιαω, and the plate gives an adequate idea of its appearance. The engraver has given the letters distinct serifs, or finishing strokes, and these are especially noticeable at the tops of the triangular letters, though never so exaggerated as they appear on Chiflet's engraving and the forgeries based on it.

Chalcedony. Lentoid with sharp edges, convex on both sides, 22 x 19 x 6.4. The illustrations are from photographs of the original enlarged 3 x 1, which I owe to the courtesy of

Prof. Fritz Eichler. I have kept them at this size instead of reducing them to the size of the original in order to show the peculiarities of the inscription more distinctly.

64

56276

Obv. A copy of Chiflet's engraving of the Vienna chalcedony, with many additional blunders. The forger has reduced the inscription to ten lines, has omitted the last two words, φυλάξετε Μαιανφ, and has not kept the lines as in the original, except the first, where he omitted a syllable.

Rev. Copied from Chiflet with even worse mistakes than those of the obverse. See the comment above (p. 307). It is particularly noteworthy that on both obverse and reverse the inscriptions were cut retrograde, to be read from an impression, contrary to the usual style of magical gems.

Sard. Broad oval, *ca.* 23 x 18. Obverse slightly convex.

The illustrations are from impressions.

65 Corpus Christi College, Cambridge (Middleton, *Lewis Collection*, C. 17)

Obv. Cock-headed anguipede to l., shield on r. arm, whip in l. hand. Imperfectly incised Α on shield, Ι just below the cock's bill, Ρ and ΚΑ behind his head, Μ just below angle of l. elbow. At each side of trunk, reading from the trunk towards the edges, ΙΗΗΝΛΟ. At each side of kilt, again reading outward, ΕΥΟ. Over the cock's comb and at a corresponding point on the lower edge is a small circle with diameters. Reading down to l. of the upper circle the letters ΙΑΗΑΙΥ can be read; reading to r. from it ΑΝΑ, then a star and crescent. Under the snake's coils, l. to r., ΑΙΙΥΙΙΜΗΥ. Round the bottom there are at least nine signs, not all real letters, and some indistinct.

The trunk of the god is noticeably long and thin. It is also to be noted that the design of this side is cut seal-fashion, which is contrary to the usual practice.

Rev. Lion-headed serpent to l., body descending vertically except for a "figure 8" twist at the middle and slight curves near the tail. Round head thirteen rays shaped like nails. Between them are small signs; a few of these, in front of the head and behind it, are letters, but meaningless. At l. side of the snake's neck, ΗΑ, at r., ΕΙΧ. Above, three scarabaei, then, descending to r., three goats and three crocodiles; to l., three birds (not hawks) with disks on their heads, and three snakes with crests.

Red jasper scaraboid, 43 x 28 x 14.

Published by King, *Cambridge Antiquarian Society Communications*, V, p. 88; Middleton, *Cat. of Lewis Collection*, pp. 79-80, with accurate cuts.

66 Cabinet des Médailles, 2198 bis.

Obv. Same figure as No. 65, with the same disproportionate length and thinness of the trunk. The stone is in fact a close replica of 65, though there are minute differences. On this stone the M behind the whip arm is set a little higher, and seems to be a little larger, than on the Lewis stone. Each stone supplies the deficiencies of the other with respect to the outermost inscriptions, which are abraded on both pieces, and it is plain that the inscriptions were meant to be identical. On this stone the rows of letters below the arms of the god have been erased purposely or have become abraded with wear; only a few traces remain.

Rev. Same design as on No. 65, from which it differs only in a trivial detail—here the feet of the two upper goats rest on the backs of the two lower; on the Lewis stone there is a little space between.

Red jasper scaraboid.

This stone seems to be very slightly shorter and broader than the Lewis stone; but it is hard to be sure of exact measurements when relying on casts and impressions. Published with cut by Babelon, *Guide*, p. 71; also in Daremberg-Saglio, II, p. 1481 (fig. 3532).

67

Musée du Louvre, Bⁱ 1616.

Obv. Design as in 65 and 66, but with certain differences. The body of the anguipede is not so long, and the attenuation is consequently not so marked. The bill, which is nearly horizontal in 65 and 66, is here tilted up, and the prominent and clearly notched comb inclines away from the vertical, while it is upright in 65 and 66. Some of the letters in the field and round the margins are indistinct, but it is evident that the maker used exactly the same copy for his inscription that was used for 65 and 66.

Rev. Design as in 65 and 66, but the uppermost of the snakes is placed a little higher in relation to the coils of the Chnoubis serpent. There is a little free space under the first and the second goat, as in 65.

Gilded bronze scaraboid, 41 x 30.

Described, and the inscribed letters reproduced, by A. Dain, *Inscriptions grecques du Louvre (les textes inédits)*, p. 184, No. 214; previously described briefly by De Ridder, *Cat. sommaire des bijoux*, No. 1616.

68

56550

Obv. and rev. apparently identical with 67 except that 68 has been slightly ground round the edges, and has perhaps suffered more from abrasion.

Bronze scaraboid, 40 x 30.

69

56069

Obv. Harpocrates standing to r. in a bell-shaped flower with a bud at each side of the stem; his l. foot rests in the cup of the flower, r. leg is bent, the foot resting on the edge of the flower. His l. hand is raised towards his face, the index finger level with his eyes. Flail with broad triangular flap over r. shoulder. Twelve rays round head, a star over head, another in front, crescent moon behind r. shoulder. At lower r, a lizard.

Rev. Ouroboros enclosing the inscription *σοῦμαρτα ἀβλαναθαναλβα ἀκραμαχαμαρε*, the last letter unfinished and like a Latin L. Outside

ouroboros, οενεωβεεσσακαωθμ [3-4] αδω [4-5] συ[1]ωσιες. Over the last letters, λσαεηι. The first two epsilons are of the broken-backed form, and the omega is small and set higher than the other letters; the theta is an ellipse lying on its longer curve. After αδω and the lacuna that follows it, the letters are all smaller and more closely set. The whole inscription is retrograde (*i. e.* on the original, not on the impression photographed for the illustration), and has many marks of its spurious character. See the comments on p. 310 above.

Carnelian. Upright oval, 32 x 25.

70

56013

Obv. "Pantheos" of an unusual and suspicious type. The face is very broad, the forehead bald, with a lock of hair falling to the neck at each side. Body nude. R. hand holds a flail which differs from the normal form; l. hand grasps a scorpion. A pair of wings is attached to the shoulders, another to the waist; tail of a bird. An ouroboros forms an empty cartouche under the feet. Two tall scepters pass through the wings; the one at the l. has a double cross at the top. At lower l. a badly formed scarabaeus.

Rev. Μιχαηλ Γακριηλ (for Γαβριηλ) Κουστιηλ Ραφαηλ. In addition to the error, κ for β, the engraver sometimes uses Λ for both alpha and lambda, and also sometimes places over both letters the long horizontal stroke which has proved elsewhere a sign of modern imitation. The use of a cross-shaped ϕ is not recorded by Larfeld at any date later than the third century of our era.

Carnelian. Upright oval, 24 x 15.

71

56456

Obv. Goddess standing to front, head to l., on back of crocodile. Tunic to ankles, upper garment crossing body and falling behind l. shoulder almost to hem of tunic. Floral (?) ornament on head, another on top of tall

scepter held in l. hand, which also holds a situla of Greek form. R. hand holds a snake, its head level with the neck of the goddess. Along r. edge, four characters of which the first two can be read as MA, a fifth in field at lower l.

Rev. Female griffin standing to r., l. forepaw on seven-spoked wheel, beak holding a small balance. The tail ends in what seems to be a bearded mask with modius on the head; the face is indistinct, and the whole effect is that of a grotesque fancy suggested by the bushy tuft that ends the tail. In field at upper l., star over crescent. In front of the griffin a heron-like bird touches the balance with its beak. What the maker meant to represent in the creature whose long tail makes the ground line is uncertain; perhaps a snake closing its jaws on a bearded human head, perhaps a man with arms raised, his body diminishing into a snake's tail.

Green jasper. Upright oval, 37 x 25.

72

Seyrig Collection

Bronze coin, 40 nummia, of Anastasius I (491-518), the reverse design smoothed off and replaced by a magical figure and inscriptions.

Obv. Bust of Anastasius to r., diadem round head, face beardless. Costume indistinct, doubtless the usual cuirass and paludamentum. Inscr., ΔΝΑΝΑΣΤΑ ΣΙΥΣΡΡΑΥΓ (Dominus noster Anastasius perpetuus Augustus). Not shown on plate.

Rev. Goat standing to r. Above, eight-limbed ring-sign followed by ΙΑΩΗ. At l. in vertical column, Α, Ι, Ω, at r. Α, ΙΕ, ΟΡ; at bottom, ΟΙΑΩ or ΩΑΩ, but all the letters are doubtful.

Diameter, 375 mm. This size, taken in connection with the obv. design, corresponds to Nos. 25, 26, and 28 in W. Wroth's *Cat. Imp. Byz. Coins in B. M.*, p. 4 (similar types are shown on pl. 1, 8-9). The present weight, gr. 11.740, is of no importance because the piece has lost about one-third of its metal

by the planing of the reverse and the fracture of the lower edge. Pierced for suspension.

For other examples of coins converted into amulets, see Mattingly, *Num. Chron.*, 1932, pp. 54-57, and a note by the present writer, *HTR*, 43 (1950), pp. 165-168, (*A Reminiscence of Paul on a Coin Amulet*).

Goats often appear on gems, but usually their occurrence has neither magical nor religious significance; the animal serves, like many others, merely as a subject for the artist's skill. No. 73 is probably an exception.

There is still no obvious reason for the choice of the goat design, though there may be an explanation if Egyptian influence can be assumed. The goat was a sacred animal in the Mendesian nome, and the British Museum *Catalogue (Alexandria)* lists a coin of that nome, minted under Hadrian, which has for its rev. type a goat walking to r. (p. 347, No. 29; no illustration). Another, of Antoninus, shows the god Mendes holding a small goat on his extended l. hand (*op. cit.*, p. 347, No. 30; Dattari, pl. 36, No. 6307). The explanation suggested may be applied without difficulty to No. 73, which need not be dated later than the third century; it is not so certain that it can be extended to the Byzantine coin. Yet, once established as a symbol charged with magical power, the goat design could have been used long after its connection with Egypt had been forgotten.

The fact that this coin was converted to use as an amulet during or after the reign of Anastasius I (491-518) gives a useful *terminus post quem* for the work. Mr. Seyrig justly remarks (letter of March 28, 1950) that the style of the engraving on the reverse is much like that of the numerous bronze pendant amulets found in Syria and Palestine. Some of them may be as early as the end of the third century (*SMA*, p. 221), but there is no doubt that they continued to be made with little technical change until well into the Byzantine period.

The inscriptions of the reverse are all but

worthless. The word *Iaw* and the ring-sign show their magical character, but except for that one word there are only meaningless combinations of vowels, with one consonantal syllable if *op* is correctly read.

73

Seyrig Collection

Obv. Goat standing to l.

Rev. *παῦσον*.

Haematite. Transverse oval, 13 x 9.

If, as Mr. Seyrig has suggested (by letter), the command *παῦσον* is a charm to check the flow of blood, the stone may be classed as a medico-magical amulet.

74

Mr. and Mrs. Frederick Zimmermann

Obv. At center, statue of the Ephesian Artemis to front. Tall projection like a stylized calathos on the head; wide headdress, suggesting the semicircular disks at each side of Artemis' head in the Capitoline statuette. The fillets hanging from the hands look like props with knots at intervals. In general, the figure resembles the type used on two coins, one of Ephesus, the other of Kadoi in Phrygia (see Cook, *Zeus*, II, p. 408, figs. 309-310). At l., Tyche to r. with cornucopia on r. arm, steering paddle in l. hand; at r., Nemesis to l., with upward curving wings. L. hand holds a fold of her garment towards her face (her traditional gesture, see, for example, Perdrizet, *BCH*, 36 [1912], p. 251); r. hand seems to hang, holding some indistinct object in front of thighs—possibly a bridle, cf. a cut in Roscher, *Lex. der Mythol.*, III, 1, p. 161, fig. 8.

Rev. plain.

Red sard. Transverse oval, 17 x 15 x 3. Modern mounting in gold wire as pin.

The piece shows no mark of magical use.

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Mr. and Mrs. Frederick Zimmermann

Obv. God standing in shrine. The structure rests on three steps and has at each side two columns which support entablature and pediment; edges of cornice decorated with tri-

angular projections set continuously. A round arch rises into the area of the pediment; under it the god stands to r. Diadem round head, mantle wrapped round middle of the body passes over r. shoulder and falls below waist; high boots. L. shoulder and arm and l. side of trunk nude. Bird of uncertain kind on l. wrist. The small size and inexact workmanship of the gem make it hard to be sure of the artist's intentions, especially in connection with the right side of the figure. A tall scepter seems to be held by the r. hand, but the top of the scepter is slightly out of line, and it is held a little below the middle instead of at a point near the top, as usual. One might think that the hanging r. hand was steadying a club with its thicker end resting on the ground; but that would leave the object above the shoulder unexplained. It could be taken for the top of a torch, but the torch would be without support, and its lower part is not visible in front of the shoulder.

I cannot identify the god here represented. The combination of half nude chest, tall scepter, and a bird on the arm suggests Zeus, but I know of no exact parallel for this figure. Its posture is rather like the reverse types of coins struck under Trajan for the Ombite nome (Dattari, pl. 34, 6325-28). Some of those figures are bearded, others beardless; Dattari identifies only one, calling it Kronos. All differ in slight details from our figure. The shrine or temple is much like one represented on the reverse of a coin of Nicopolis (Palestine) struck under Elagabalus; the piece belongs to the collection of the White Fathers of St. Anne of Jerusalem (see *Revue Biblique*, 57, [1950], p. 120, with pl. II, 18 *bis*; cf. also 18). Like No. 74, this stone shows no marks of magical use.

Rev. plain.

Sard. Upright oval, 14 x 11 x 4. Obv. slightly convex, rev. flat. Modern gold wire mounting as pin.

76 Mr. and Mrs. Frederick Zimmermann
Obv. Bull charging to left. Above, the inscription $\Theta\Theta\Theta\Delta\Omega\text{P}$.

Rev. $\Theta\Theta\Theta\Omega\Delta\Omega\text{P}$. The round forms of θ , ω may indicate that the lettering on the rev. was done by a different workman.

Black jasper. Transverse oval, 18 x 14 x 3. Similar but better representations of the subject may be seen in Walters, *Cat. Engr. Gems in B.M.*, pl. 28, No. 2346; Furtwängler, *Ant. Gemmen*, pl. 28, No. 65. These have no mark of magical use, and in general, figures of bulls are little used for magical amulets. See, however, *SMA*, p. 322, No. 397, a haematite belonging to Mr. Seyrig, with a bull's head on the obv., and a charm against hemorrhage on the other side.

77 Mr. and Mrs. Frederick Zimmermann
Obv. Cross potent encircled by inscription beginning at lower l., $\kappa\acute{\upsilon}\rho\iota\epsilon\ \beta\omicron\upsilon\theta\eta$.

Rev. plain.

Olive-green glass paste. Circular, diameter 20, thickness 6. Beveled edge, design on smaller face. Modern mounting as pendant, gold wire with suspension loop.

The inscription on the obverse is a very common prayer to which the name of the owner is often added; see Dalton, *Cat. of Early Christian Antiquities in B.M.*, pp. 23-24, Nos. 137-149; and *Cat. of Engraved Gems of the Post-Classical Period*, p. 1, Nos. 3-4.

78 Mr. and Mrs. Frederick Zimmermann
Obv. Above, $\text{IX } \Theta\text{VC}$. Below, a character like ξ with an extra stroke or MA set vertically, followed by ΞZE . Then, in four lines, the seven vowels in "pyramid" sequence (one alpha, two epsilons, etc.), with a bee engraved between the first eta and the second.

Rev. plain.

Yellowish red carnelian. Transverse oval, 17 x 12 x 4. Obv. slightly convex, rev. flat. Modern mounting in gold wire as pin.

The choice of the letters IXΘVC, widely used as a Christian symbol, can hardly be a mere coincidence; but the amulet is not purely Christian, for the vowel sequence below is common in magical use. Further, the bee was an important religious symbol in pagan Ephesus (also a center of magical learning, *Acts* 19.19); bees were represented on the statue of Artemis at Ephesus (Cook, *Zeus*, II, p. 407, with fig. 307), and on coins of the city (Imhoof-Blumer and Keller, *Tier- und Pflanzenbilder*, pl. 7, 18-22; also *B.M. Cat. Ionia*, pls. 9-11). There are still other religious connections of bees. The soul was sometimes believed to take this form; see Porph., *de antro nymphaeum*, 18; Soph., *fr.* 879, with Pearson's notes. In modern times, bees are among the forms assumed by *stoicheia* (originally, *elements*, hence, spirits or demons); see Argenti-Rose, *Folk Lore of Chios*, I, pp. 234-5.

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Obv. The sign



Rev. plain.

Haematite. Rectangular, 16 x 13 x 3. Mounted as pin in gold wire.

I have not found the symbol of the obverse elsewhere. When viewed with the horizontal line as base, the upper part suggests an irregular form of the XP monogram, usually written X or P. Reversed, the outline is somewhat like a Christian design of an anchor with a fish attached; see the figure in Martigny, *Dict. des ant. chrét.*, p. 657; but I have seen no anchor with straight arms.

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Obv. COXNA. The A is broken but almost certain, since there is a clear trace of a sloping stroke at the edge of the break, and a short horizontal serif at its top. The choice is between A and Λ.

Rev. plain.

Oblong haematite, corners rounded, 23 x 20 x 3.

Chipped at r. end of obv. and both ends of rev. Mounted as pin in gold wire.

The only interesting point about this piece is the reason why it was preserved. It may be only because its finder recognized in it a bit of ancient and hence potentially magical writing; or because an early owner thought that it carried a sacred name, and therefore preserved it even after part of it was broken off—for it is almost certain that the original word was longer. The elements Σοχ, Σοχv (also Σοκ, Σοκv) are derived from the name of the god Sobk (Σοῦχος). The complete name may have been Σοχvαπαῖος, usually Σοκvοπαῖος.

81 Seen by the Rev. Father R. Mouterde in the vicinity of Tyre.

Obv. God of the Horus-Pantheos type (*SMA*, pp. 157-159) standing to front, nude. Face beardless and apparently youthful; but, unless there are deceptive stains or cracks on the surface, there is also an older, harsh-featured face with prominent nose; it is seen in profile at the (spectator's) left of the younger face. Rays project from the top of the head; broader projections at the r. side may be indistinct indications of the animal heads often seen at both sides of the face and neck of this pantheistic figure (e.g., *SMA*, Pl. 12, 254, 256). Wings are attached to the shoulders and the thighs. The god's r. arm is at his side, the hand perhaps holding an animal, which is seen upright in the field; the l. hand rests on the hip. Above, αβρασάξ, at l., ακραμμαχαμαρε (two lines), at r., σεσενγενβαρφαρανγης (two lines), below, αβλαναθαλαβα (two lines).

Rev. Harpocrates seated to l. on lotus capsule, r. hand raised towards mouth, l. holds flail over shoulder. Nimbus with twelve rays round head, and over this the hemhem crown (three reed-bundles resting on two uraei). The stalk of the lotus rests upon a crocodile (head to r.); further to r., a palm frond. At bottom, Δαρναμενευς (two lines).

"Émeraude grise" (Mouterde); perhaps more accurately, gray beryl. Upright oval, 45 x 25 (62 x 35 with the elaborate gold mounting). The figures are from direct photographs of the original, slightly enlarged (about one twentieth).

I am deeply indebted to Father Mouterde for his generosity in allowing me to use his notes and to anticipate his own publication of this object, which, because of its inscriptions, will ultimately be included in a fascicle of his *Inscriptions grecques et latines de la Syrie*.

The figures of both obverse and reverse are familiar types, but they present some novel features. The youthful figure of the obverse shows the relationship of the "Pantheos" to the young Horus, as he is represented on the magical stelae of the Metternich type (Budge, *Gods*, II, p. 271); the older face (if such it is), which is seen at 1., may represent an attempt to combine with Horus the mask of Bes, which, on the older magical stelae, is sometimes placed over Horus' head (Budge, *loc. cit.*; *SMA*, Pl. 24,

Fig. 5). The result looks like a two-headed man; I remember no specimen like it.

On the reverse there is a strange combination in the headdress of Harpocrates. On dynastic monuments the young god is often shown wearing the hemhem crown, and it appears also in Roman times in types derived from the Harpocrates of Pelusium. (*Hesperia*, 15 [1946], pp. 51-59 with pl. 12; *SMA*, Pl. 10, 217-219A); but the child seated on the lotus usually has only the disk or the nimbus. Here the nimbus and the hemhem crown are combined in a top-heavy arrangement. I have not elsewhere seen the lotus-stalk resting on a crocodile, but on a gem published by Chiflet (*Abraxas Proteus*, pl. 10, 40), a running lion is similarly placed.

The inscriptions of both obverse and reverse consist of very common magical words, all of which are thought to belong especially to solar divinities; see *SMA*, pp. 191, 201-202.

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ATHENIAN CITIZENSHIP OF ROMAN EMPERORS

IN *Hesperia*, XVIII, 1949, p. 38 James A. Notopoulos pointed out that the curious notations in small letters *Αὐρήλιοι* on *I.G.*, II², 1824 and *Αὐρήλ[-]* on *I.G.*, II², 1825 occupied on these two catalogues of the tribe Attalis the same position as the notations in small letters *Μ. Αὐρ. Σεβήρο[ς]*, *θεὸς Ἀδριανός*, *θεὸς Κόμοδος* occupied on *I.G.*, II², 1832,—that is to say, a position between the heading in large letters and the catalogue of prytaneis in small letters. From this he drew an inference: “*Αὐρήλιοι* therefore can only refer to two Roman emperors who ruled together. These are M. Aurelius Antoninus (Elagabalus) and M. Aurelius Severus Alexandrus (Severus Alexander) who shared the rule in 221 and 222 A.D.”

In *A.J.P.*, LXX, 1949, pp. 306 f. James H. Oliver pointed out the most obvious flaw in this inference. Whereas *I.G.*, II², 1824 and 1825, on which the *Aurelioi* appear, were catalogues of Attalis, *I.G.*, II², 1832 with the names of Severus Alexander, the deified Hadrian and the deified Commodus was a catalogue of Hadrianis. It is well known that Hadrian and Commodus (*v. infra*) belonged to Besa, a deme of Hadrianis, and so it is clear that in engraving their names in small letters on the tribal catalogue, the prytaneis of Hadrianis were not honoring these emperors dead and alive but were boasting of distinguished *phyletai*. Accordingly, Oliver pointed out as his first and main objection to the identification that if the parallel with *I.G.*, II², 1832 had any validity, also the prytaneis of Attalis, who recorded the *Aurelioi*, were boasting of distinguished *phyletai*, and that Severus Alexander who belonged to the tribe Hadrianis, could not have been one of the *Aurelioi*.

No Roman, not even an emperor, could belong to more than one post-Pompilian Roman tribe.

No Athenian, not even an emperor, could belong to more than one post-Solonian Athenian tribe.

The prytany catalogue *I.G.*, II², 1826 is from the same year as *I.G.*, II², 1825. Why does it not have a reference to the *Aurelioi*? Because it is a catalogue, not of Attalis, but of another tribe (Pandionis).

Erroneously assuming that, as Notopoulos asserted, the *Aurelioi* would have to be co-regent and being unable to date the inscriptions *I.G.*, II² 1824 and 1825 in the joint reign of Caracalla and Geta, Oliver erroneously argued for a date in the reign of Caracalla before the death of Septimius Severus, to which time some prosopographical evidence seemed indeed to point. However, Oliver warned his readers that other prosopographical evidence pointed toward the period of Severus Alexander, in the first two years of whose reign Notopoulos wished to date *I.G.*, II², 1824 and 1825. Oliver's date was the traditional date reexpressed in terms of the theory that the *Aurelioi* were living emperors, while Notopoulos' date was a new date expressed in

terms of the same theory. More recent evidence, contributed by Mitsos,¹ has settled the question of the approximate date at which the inscriptions were erected,—that is to say, they were erected presumably in the reign of Severus Alexander.

In *Hesperia*, XX, 1951, p. 65 Notopoulos reopens a discussion of the *Aurelioi* with the words, "The question as to the identity of the *Αὐρήλιοι* in *I.G.*, II², 1824 is worth settling once and for all," and then, alas, without giving the reader any idea of Oliver's first and main objection to an identification with Severus Alexander and, of course, without meeting that objection, Notopoulos reasserts that the *Aurelioi* of the catalogue of Attalis, *I.G.*, II², 1824, were Elagabalus and Severus Alexander, while in the other catalogue of Attalis, *I.G.*, II², 1825, which is too late for a living Elagabalus, he would restore the singular *Αὐρήλ[ιος]* and finds a reference to Severus Alexander as sole emperor. This is impossible because Severus Alexander belonged to the tribe Hadrianis, but even if it were not impossible, the analogy of *I.G.*, II², 1824 shows that the notation in *I.G.*, II², 1825 must be restored in the plural *Αὐρήλ[ιοι]*.

The new evidence contributed by Mitsos does not really confirm the identification with Severus Alexander, as Notopoulos thinks. Rather it destroys the assumptions of Notopoulos that the *Aurelioi* were living emperors and that they were therefore necessarily co-regent. After all, neither Severus Alexander nor any other living emperor could have been designated merely as *Aurelios*. If an emperor or a member of the imperial family was so ambiguously designated, it follows that his name could not be mentioned. The name, which for Greeks was the cognomen, could always be mentioned, unless the bearer had suffered *damnatio memoriae*. Hence the *Aurelioi* of *I.G.*, II², 1824 and 1825, if emperors, were two emperors who had suffered *damnatio memoriae*, to wit, Caracalla and Elagabalus. The latter is not reputed to have been a strong friend of Athens or patron of Hellenic culture, and an offer of citizenship to him first would have been astonishing; but if Caracalla, his pretended father, had had Athenian citizenship, Elagabalus upon his recognition might have received the citizenship automatically. Both through his mother² and friends³ Caracalla had had close connections with Athens, so that his citizenship would be easily explained.

¹ M. Mitsos, *Ἀρχ. Ἐφ.*, 1951, No. 6, pp. 21-23. Incidentally on p. 47 Mitsos, who reads the name of Severus Alexander in line 3 of *I.G.*, II², 2330, comments as follows: "The reading of the third line has significance in that it confirms the opinion of Graindor, Kirchner and Notopoulos that the emperor M. Aurelius Severu[s] of *I.G.*, II², 1832 is Severus Alexander and not Caracalla, because both inscriptions were composed in the archonship of Casianus." Lest the absence of Oliver's name from this list of right-thinking students of Athenian chronology imply that Oliver assigned *I.G.*, II², 1832 to the time of Caracalla, it may be pointed out that Oliver dated *I.G.*, II², 1832 to the reign of Severus Alexander both in his archon list, *Hesperia*, XI, 1942, p. 89, and in *A.J.P.*, LXX, 1949, p. 306, and that he has never harbored the opinion impugned by Mitsos.

² "Julia Domna as Athena Polias," *Athenian Studies Presented to William Scott Ferguson* (= Harvard Studies in Classical Philology, Suppl. Vol. I, 1941), pp. 521-530.

³ "Connections and Identity of Caracalla's Favorite Lucilius Priscillianus," *A.J.A.*, L, 1946, pp. 247-250.

In summary, then, Notopoulos believes that the distinguished *Aurelioi* of *I.G.*, II², 1824 and 1825 were living emperors at the time the inscriptions were erected, while Oliver believes they were dead emperors. While Notopoulos has not explained how the curious notations came to be engraved, Oliver explains them as follows. When the emperor Severus Alexander accepted citizenship, he selected the tribe Hadrianis in which Hadrian and Commodus had been enrolled. The tribe Hadrianis, flattered by the choice, boasted of its three emperors and cut a figure as the imperial or royal tribe. The tribe Attalis, not to be outdone, then reminded the Athenians that it too had had emperors, though it could not mention them by name.

In view of the great importance of the imperial precedent ⁴ it is striking that an emperor would accept even Athenian citizenship in addition to that of Rome. The acceptance of citizenship was a very different thing from an acceptance of initiation into the Mysteries (as in the cases of Augustus, Lucius Verus and Marcus Aurelius), or entry into the Eumolpidae ⁵ (as in the case of Lucius Verus), or agreement to serve as archon at least in name (as in the case of Domitian, who, as far as we know, never became an Athenian citizen). It is striking because of the old law which provided that a Roman who accepted citizenship in another city automatically lost his Roman citizenship.

Of course, as early as the first century B.C. many Italians had accepted Athenian citizenship, as we know both from inscriptions and from Cicero's shocked surprise,⁶ but these were little people who may have started to do so even before their families received Roman citizenship. No Roman senator or Roman knight would have lightly accepted Athenian citizenship at this time. For example, Pomponius Atticus, though long a resident and closely associated with Athens, did not become an Athenian citizen. In the first century after Christ the impediment was still strong, at least for genuine Romans or Romans of rank. The first case, so far attested, of a Roman knight accepting Athenian citizenship is that of Q. Trebellius Rufus of Tolosa in Narbonnese Gaul in the Flavian Period. The first case, so far attested, of a Roman senator accepting Athenian citizenship is that of P. Aelius Hadrianus of Italica in Baetica in the Trajanic Period. The first Roman emperor to accept Athenian citizenship was Commodus.

The following list of emperors with Athenian citizenship includes Hadrian, who was already a citizen when he became emperor, and Elagabalus, who may have been treated as already a citizen when he became emperor.

Hadrian. Tribe Hadrianis. Deme Besa. *I.G.*, II², 1764 and 1832 (a catalogue of Hadrianis). He chose Besa because of Philopappus (cf. *A.J.P.*, LXXI, 1950, pp. 295-299).

⁴ Compare Herodian, *Ab excessu divi Marci*, I, 2, 4.

⁵ For the entry of non-Athenians into the genos of the Eumolpidae see *Hesperia*, Suppl. VIII, 1949, opposite p. 248.

⁶ *Pro Balbo*, 12, 30: nonnullos imperitos homines.

Commodus. Tribe Hadrianis. Deme Besa. *I.G.*, II², 1832 (a catalogue of Hadrianis); *Hesperia*, XI, 1942, pp. 58-63, and Suppl. VIII, 1949, pp. 279-290. He chose Hadrianis and Besa because of Hadrian.

Caracalla. Tribe Attalis. Deme unknown. He is inferred to be one of the *Aurelioi* mentioned in catalogues of Attalis from the time of Severus Alexander, *I.G.*, II², 1824 and 1825 (see above). His choice of Attalis was motivated perhaps by the tribal affiliation of friends at Athens.

Elagabalus. Tribe Attalis. Deme unknown. He also is inferred to be one of the *Aurelioi* (see above). His tribal affiliation depends on that of his pretended father Caracalla.

Severus Alexander. Tribe Hadrianis. Deme unrecorded but presumably Besa. *I.G.*, II², 1832 (a catalogue of Hadrianis). He chose Hadrianis presumably because of Hadrian.

Gallienus. Tribe unknown. Deme unknown. *Vita Gallieni* 11, where the facts, unlike the aspersions, are from Dexippus: Cum tamen sibi milites dignum principem quaererent, Gallienus apud Athenas archon erat, id est summus magistratus, vanitate illa, qua et civis adscribi desiderabat et sacris omnibus interesse.

The purpose of the imperial government in the emperor's assumption of Athenian citizenship was to advertise the emperor as a perfect Greek. From Commodus to the unhappy Gallienus it seemed important for an insecure and imperfect emperor to appear a "Greek and Roman"; and he was judged largely as to whether or not he corresponded to the cultural ideal of the urban middle and upper classes in both halves of the empire (cf. Herodian, *Ab excessu divi Marci* V, 5 on the education of Severus Alexander).

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ON THE ATHENIAN DECREES FOR ULPUS EUBIOTUS

(PLATE 101 a)

I

IN *The Sacred Gerusia* (= *Hesperia*, Supplement VI, 1941), Nos. 31 and 32, the writer published fragments of two inscribed copies of decrees passed by Athenian public corporations in honor of their benefactor, the consular M. Ulpus Eubiotus Leurus. The decrees were dated to about the second quarter of the third century after Christ on prosopographical evidence and to about the reign of Alexander Severus by mention of the Sacred Gerusia which would seem to have ended in the time of Maximinus Thrax. The small fragment labeled Fragment *a* of No. 31 should have been given as Fragment *b* of No. 32 because it belongs in a section corresponding to the part of No. 31 labeled lines 24-33, which gains accordingly in comprehensibility. The fragment should read as follows with those letters underlined which appear in No. 31:

[εἰσκαλείσθαι δὲ αὐτὸν καὶ εἰς τὸ θέατρον διὰ τῶν πρυτάνεων αἰεὶ ἐπὶ προεδρίᾳ καὶ
κοινωνίᾳ θυσιῶν καὶ σπ]ονδῶ[ν τῶν ἔν τε πομπαῖς πάσαις καὶ ἐκκλησίαις γεινομένων αὐτόν
τε καὶ τοὺς παῖδας αὐτοῦ τοὺς κρ Οὐλ Τεισαμενὸν καὶ Πονπήμιον Μάξιμον· μετεῖν]αι δὲ
αὐτ[ῷ τε καὶ τοῖς παισὶν αὐτοῦ τῶν αἰσειτιῶν καθάπερ τῷ ἱεροφάντῃ καὶ — — — — —
τῶν γεινομένων ἔκ τε τῆς πόλεως καὶ τῶν ὑπὸ] φιλοτε[ιμίας — — — — — ιας ὅτε βούλοιτο,
καὶ εἰ βούλοιτο, ἑαυτὸν καθιέντος] προγραφ[— — — — — λαμπρότητα ὃ καὶ τὴν διὰ τὰς
Ἀθήνησιν πολειτίας ἀμοιβὴν — — — — — κύριον δὲ εἶναι τόδε τὸ δόγμα εἰς τὸν ἅπαντα χρόνον
καὶ τὰς εἰς τὸν λαμπρότατον ὑπατικὸν τειμᾶς — — — — — ι μετὰ τ[— — — — — ἐξηγηταῖς κα]ῖ
μάντε[σι καὶ τοῖς ἐφ' ἱερᾶς διατάξεως ὡσαύτως ὃ πρόεδρος ὃ “ ὅτῳ δοκεῖ κύριον εἶναι
τ]οῦτον τὸ[ν νόμον κατὰ τὰ ἀνεγνωσμένα ὃ ἀράτω τὴν χεῖρα” ὃ πάντες ἐπήραν ὃ “ καὶ ὅτῳ
μή” ὃ οὐδεὶς ἐπήρεν ὃ ἔδοξεν τῷ δήμῳ ^{vacat} καὶ τοῦ αὐτοῦ μηνὸς εἰ, γνώμην ἀγορεύσαντος
Ἀνρ — — — — — ἐν τῷ σεμνοτάτῳ σ]υνεδρί[ῳ τὴν τῆς βουλῆς ^{vacat} ἐπηρώτησεν ὃ πρόεδρος
^{vacat} ἔδοξ]εν τῇ [ἐξ Ἀρείου πάγου βουλῇ, κτλ.

At the end of the corresponding passage of No. 31 the writer in the *editio princeps* after much hesitation erroneously restored ἔδοξεν τῷ δήμῳ, because believing that a passage in lines 39-40 had to be reconstructed καθάπερ ἡ βου[|λή περὶ το[ύτων προ]εβουλεύσατο, he thought that the first document was a probuleuma. The data can of

course be interpreted as ἡ τῶν Φ βου]λή and ἐβουλευσατο with some three-letter word—he can think of several—in front of the verb. That the second decree is a ὑπομνηματισμός of the Areopagus appears also from line 56 where the technical term ὑπομνηματίσαι is used.

Thus the difficulties in respect to the public procedure disappear, and the honors seem to be handled like the consolation in the case of T. Statilius Lamprias, where the inscription contains two consolatory decrees, one by the Areopagus (first on the stone), and the other by the Council and Demos of the Athenians.¹ The decree of the Areopagus followed in time and paralleled in language the decree of the Council and Demos. Analogously, in the case of Eubiotus the decree of the Areopagus is worded much like, but not exactly like, the decree of the Council, which it follows in time.

Nor is there any difference in the role of the Demos. In the case of the decrees concerning the death of T. Statilius Lamprias the earlier decree was labeled a decree of the Council and Demos. The *dogma* of the Council had been read in the Ecclesia and there ratified by the Demos. As to the case of Ulpidius Eubiotus, it is expressly stated in another inscription, *I.G.*, II², 3699, that the honor of a statue was granted δόγματι τοῦ σεμνο[τά]του συνεδ[ρί]ου καὶ τῆς πόλεως συνπάσης. Reference to the entire

¹ *I.G.*, IV² (1), 82 = *S.I.G.*³, 796. The inscription is dated by B. Keil *Beiträge zur Geschichte des Areopags*, p. 3 (= Berichte über die Verhandlungen der Sächsischen Akademie der Wissenschaften zu Leipzig, Phil.-hist. Kl., Band 71, 1919, Heft 8), in the time of Nero, but “vers l'époque de Claude” on a stronger argument by P. Graindor, *Chronologie des archontes athéniens sous l'empire*, No. 41 bis on pp. 71-74 and 309 (= Mémoires publiés par la Classe des lettres et des sciences morales et politiques de l'Académie royale de Belgique, Collection in quarto, Deuxième Série, VIII, 1921). The secretary of that year came from the tribe Aiantis (X), and if one is justified in rotating the secretary cycle back from A.D. 117/8 (*I.G.*, II², 1072), the year of the archon Secundus might best be identified as A.D. 38/9; and the reference to troubled times, it seems to me, may best be interpreted as a reference to the last years of Tiberius. Also E. Groag, *Die römischen Reichsbeamten von Achaia bis auf Diokletian* (= Akad. d. Wiss. in Wien, Schriften der Balkankommission, Antiquarische Abt., IX, 1939), pp. 29 f., note 115, although he saw in the reference to troubled times those of Caligula, accepted Graindor's (and Mommsen's) date. The other view, recently defended by H. Dessau, *Gesch. d. röm. Kaiserzeit*, II (Berlin, 1930), p. 544 and A. Momigliano, *J.R.S.*, XXXIV, 1944, pp. 115 f., that the reference to the new freedom is a reference to Nero's declaration of freedom at the Isthmian Games in the late autumn of A.D. 67, breaks down, among other reasons, because of evidence from the cycle of Athenian secretaries. The year seems to be 38/9 or 50/1 or 62/3 or 74/5, and only the first of these will do. Disturbances which occurred at Athens late in the reign of Augustus and which are attested by Eusebius, St. Jerome, Georgius Syncellus, Orosius, and Paulus Diaconus (see P. Graindor, *Athènes sous Auguste*, pp. 41-45, who erroneously argues against them from the silence of Tacitus, as if Tacitus had a stenographic record of what Cn. Piso said to the Athenians in A.D. 18, and as if Tacitus would have felt obliged to repeat references no longer easily comprehensible to a Roman public) strongly suggest a break in the secretary cycle late in the reign of Augustus, but no similar disturbances suggest a break between the time of Claudius and that of Trajan. In the writer's opinion these disturbances and the agreement of the early date for *S.I.G.*³, 796 with a projection of the cycles from the Trajanic Period are for anyone reconstructing the Athenian secretary cycles of the first century after Christ the two most important factors to be considered.

polis, as B. Keil² pointed out, is a reference to cooperation between Council and Ecclesia.

The participation of the Demos actually emerges from the above presented reconstruction of fragment *a*. Whereas the *dogma* of the Council is mentioned first, somewhat further on we encounter a reference to a rogation, a proposal to the people, ὅτω δοκεῖ κύριον εἶναι τ[οῦτον τ[ὸν νόμον, κτλ., for the change from neuter to masculine can be explained, I think, on the assumption that the word νόμος is being significantly substituted for δόγμα. If so, it means "rogation" as in Plutarch, *Ti. Gracchus*, X, 1; Appian, *Bel. civ.*, I, 12; and Dionysius Hal., X, 4, etc.

Accordingly, between the decree of the Council and the ὑπομνηματισμός of the Areopagus the inscription had a brief passage recording the vote of the Ecclesia in ratification of the decree of the Council. Another case of a passage recording subsequent ratification by the Demos (the Chalcidian) of an honorary decree occurs in a contemporary document from near-by Chalcis *S.I.G.*,³ 898, a parallel of unusual satisfaction because like our inscription it speaks of an ἀμοιβή for the services rendered and of extending grateful treatment also to the sons of the benefactor. The inscription from Chalcis concludes, Δ ἡ μ ο ν ὁ στρατηγὸς τὸ β' Νόוניος Λυσανίας εἶπεν· "καλῶς ποιεῖτε ἀμειβόμενοι τοὺς ἀγαθοὺς ἄνδρας, καὶ μὴ εἰς αὐτοὺς μόνους τὰς τιμὰς ἀλλὰ καὶ εἰς τοὺς παῖδας μετατιθέντες· μόνως γὰρ οὕτως καὶ τοὺς ἄλλους ἐπὶ πολλοῖς προτρέπομεν. ἔφθακεν οὖν ταῦτα ἐψηφίσθαι καὶ τῇ βουλῇ· εἰ καὶ ὑμεῖν δοκεῖ, ἀράτω τὴν χεῖρα." ἐβ(όησεν) ὁ δ(ῆμος)· "δοκεῖ." ἔδοξεν.

It is of less importance but still of some interest that the evidence from the fragment of which we have just presented a reconstruction establishes the restoration καὶ σ[πον]δῶν in No. 31, lines 23-24, where the extent of the lacuna had been overestimated by two-and-a-half letter spaces. With faith the sigma can actually be discerned on the squeeze though not in the photograph. Thus a common formula emerges.

The reconstruction here offered presupposes one variation of text. Whereas the small fragment reads in its second line μετεῖν]αι δὲ αὐτ[ῷ], No. 31 reads μετεῖναί τε αὐτῷ. It was this above all that deceived the writer as to the position of the fragment, but two copies of the edict of Tib. Julius Alexander, both engraved at Hibis,³ and two copies of an imperial letter, both engraved at Ephesus,⁴ present similar discrepancies.

II

On p. 126 of *The Sacred Gerusia* the inscription published previously as *I.G.*, II², 1064 was identified as a fragment *d* of this text (No. 31). Since the surface of the

² *Op. cit.*, p. 31.

³ The Metropolitan Museum of Art, Egyptian Expedition, XIV, Nos. 3 and 4.

⁴ *Forschungen in Ephesos*, II, No. 24 and *Jahreshefte*, XXVII, 1932, Beiblatt, 21 f.

stone had disintegrated, the identification could not be verified at the time (1940 and 1941) because Kirchner's squeeze could not be consulted. In December 1949, however, the author wrote to Günther Klaffenbach, who with courtesy and remarkable generosity dispatched the valuable squeeze, so that it becomes possible for the author to verify his conjecture, control the reading and present the photograph on Plate 101a.

The author, who has so much more to go on, finds that Kirchner made an excellent reading of the difficult inscription *I.G.*, II², 1064. A few slight corrections for the author's own text ⁵ have emerged: α]ὕτῳ τε κα[ὶ] το[ῦς κ]ρ π[α]ισ[ὶ]ν καὶ, line 45; θυσιῶν καὶ σπονδ]ῶν, line 46; τηλικαῦτα [τ]οι[αῦτα, line 47; γεινομένω[ν ἐκ] τῆς πό[λεως, line 48; [κ]αθιέν[τος, line 49; [πο]λιτε[ίας, line 50; ὑπομνηματίσαι [δὲ, line 56.

III

The Council, in what is left of its decree in the two copies, assigns the following honors in the following order:

A. Precedented Honors

- 1) Praise for his benefactions which are enumerated.
- 2) Bronze statues of Ulpus Eubiotus and his two sons to be erected at public expense both in the Synedrion of the Sacred Gerusia and in the Prytaneum and to be accompanied by inscriptions.
- 3) Right of public maintenance for him and for his sons, in Tholos and Prytaneum, with additional honor of a double portion and of [a crown] at Games and Festal Assemblies.
- 4) Front seats at the said Games.
- 5) Occupiable by him or by one of his sons, a throne to be engraved with his name and to be placed in the Theatre of Dionysus, where the exegetes and manteis shall decide, with the resulting exemption from taxation and liturgy throughout Attica and the islands belonging to the Athenians.
- 6) Invitation by the prytaneis on each occasion, for him and for his sons, to the Dionysiac Games, with the honor of a front seat.

B. Unprecedented Honors. (Here is where the small fragment reconstructed above belongs.)

- 7) Invitation to the Theatre by the prytaneis on the occasion of every public procession and of every assembly meeting, for himself and his two sons, with the honor of a front seat and of a share in sacrifices and libations.

⁵ *The Sacred Gerusia*, p. 129.

8) Participation in the kind of public maintenance to which the hierophant [and the daduchus] were entitled, and in all distributions made out of state funds or out of private benevolence [to Athenian Councillors?]. (The phrases "when he so wishes and if he so wishes," etc., may belong to specifications concerning the modalities of sharing in certain of these distributions, or of passing his portion to another, but the sense is uncertain. The word *λαμπρότητα*, which suggests the brightness of unworn coins, e. g. *τὴν αὐτὴν ποσότητα καὶ λαμπρότητα*, may conclude this section.)

The honors listed as precedented honors are particularly interesting. The double portion was a perquisite of the Spartan kings and as a mark of special honor was common at all periods of Greek history.⁶ That a throne in the Theatre might be assigned to a benefactor is not new information, but that exemption from taxation and liturgy followed this grant automatically is new information, as also the administrative control by the exegetes and manteis, who at Athens corresponded to the Roman *sacerdotes publici*. The privilege of public maintenance in the Prytaneum is particularly well known from Attic literature and, among others, from a mutilated but illuminating inscription of the fifth century B.C. On the other hand, maintenance in the Tholos, while not entirely unattested,⁷ is certainly a striking privilege.

The question with the affirmative and negative votes recorded just before the vacant area which separates the proceedings in the Areopagus from the rest presumably refers to the rogation of the Demos, so that after the phrase *οὐδείς ἐπῆρεν* one should restore ^v *ἔδοξεν τῷ δήμῳ*. The minutes of the question and vote in the Council would have been engraved at the beginning of the decree as the minutes of the proceedings in the Areopagus are engraved at the beginning of the *ὑπομνηματισμός*.

The *ὑπομνηματισμός* of the Areopagus reproduces articles 1-8 without distinguishing between precedented and unprecedented honors and with transposition of the section concerning the throne and the resulting immunity from taxation and liturgy to a position near the end. Furthermore it appends an obscure section concerning a committee of distinguished Athenians who perhaps were to call upon Ulpus Eubiotus and bring him the news.

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⁶ To the literature add now H. C. Youtie, "The Kline of Sarapis," *Harvard Theological Review*, XLI, 1948, pp. 9-29, especially pp. 21-22.

⁷ A name without a title may occasionally turn up in a list of *aiseitōi* at the end of a prytany catalogue. One might compare *Inscriptiones Creticae*, I, pp. 234-236, No. 3, where benefactors of Mallia receive the privilege of dining with the *kosmoi* (line 38).

A PTOLEMAIC BRONZE HOARD FROM CORINTH

(PLATE 101 b)

IN February of 1948 a group of 34 bronze coins of the Ptolemaic period was found during the excavation of a well in the South Stoa of Corinth.¹ Although no container was in evidence, the circumstances of finding indicate that this is a hoard whose final burial is to be related to the destruction of the city in 146 B.C.

With three exceptions, the coins are all of the same issue:

<i>No.</i>	<i>Size</i>	<i>Obverse</i>	<i>Reverse</i>
1-31.	25 to 30 mm. ²	Head of Isis r., with wreath of grain. Circle of dots.	ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ. Eagle l. on thunderbolt, wings open; in field l., $\overline{\text{A}}$. ³ Circle of dots.

(Pl. 101 b, left; Svoronos, *Tà Νομίσματα τοῦ Κράτους τῶν Πτολεμαίων*, No. 1384)

32.	29 mm.	[ΒΑΣΙΛΙΣΣΗ]Σ ΚΛΕΟΠΑΤΡΑΣ. Head of Zeus Ammon r. Circle of dots.	ΠΤΟΛΕΜΑΙΟΥ [ΒΑΣΙΛΕΩΣ]. Two eagles l. on thunderbolt, wings closed; in field l., cornucopiae. Circle of dots. ⁴
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(Pl. 101 b, center; Svoronos, No. 1380)

¹ Well XIX in the Corinth excavation records of the American School of Classical Studies at Athens.

I am deeply indebted to Professor Oscar Broneer, director of the Corinth excavations, for permission to publish this hoard, and to Dr. G. Roger Edwards, who excavated the well, for helpful suggestions and information regarding the coins and their provenance.

² The coins with unbroken diameters measure: 28, 27.5, 28.1, 26, 28, 26.2, 27, 26.5, 28.2, 27, 26.7, 27, 26.3, 28.8, 30, 27, 26.7, 27, 27.2, 25, 28.8, 27.4, 27.8, 28.3, 30.2 (Pl. 101 b, left), and 26.2.

Corrosion in some degree or other has affected many of the coins so that weight statistics are of minor value. The specimen illustrated on Pl. 101 b weighs 15.29 grams; other fairly well preserved pieces show the following variation: 14.43, 16.80, 15.20, 18, 15.10, 16.52, 15, 16.10, 19.37.

³ Seventeen pieces bear a clear impression of the monogram; three others probably carried the same marking. Of the remaining 11, the left field is broken in seven cases and illegible in four.

The $\overline{\text{A}}$ is often interpreted as the mark of the Paphos mint, but this is hypothetical. J. G. Milne ("The Copper Coinage of the Ptolemies," *Annals of Archaeology and Anthropology*, I, 1908, p. 39) believes that the frequency with which this Isis head type is found in Egypt renders a Cypriote origin dubious. He prefers to explain the monogram as an indication of value. The argument is based in part on his observation that only the coins of smaller size, 28 mm. or less, are struck with the $\overline{\text{A}}$. However, in our hoard the largest specimen, of 30.2 mm., has a clearly defined monogram, while the $\overline{\text{A}}$ appears also on fractional issues of the same general period (Svoronos, Nos. 1382 and 1387).

⁴ This issue has the monogram $\overline{\text{A}}$ between the legs of the second eagle. On our piece that section of the flan is missing.

- 33-34. 26 mm.⁵ Head of Zeus Ammon r. Circle of dots. ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ
(legend incomplete on both coins). Two eagles l. on thunderbolt, wings closed; in field l., cornucopiae. Circle of dots.

(Pl. 101 b, right; Svoronos, Nos. 1424-1425)

For the most part the coins are in a fair state of preservation, but a number are badly corroded, presumably as a result of their long exposure to the dampness of the soil. This is frequently true of bronze money found in wells and cistern deposits in Greece, making it difficult to estimate how much use individual coins had had prior to burial. Of the three odd pieces, No. 32 shows distinct signs of wear, No. 33 is in rather better than average condition, while No. 34 is too deeply corroded for any evaluation of its original state. All specimens are marked with the small circular depressions characteristic of the larger Ptolemaic bronze.

The well from which the coins came was apparently opened in the late fourth or early third century B.C. During the 150 years of its use and subsequent abandonment, a total of 87 coins, together with large quantities of pottery and miscellaneous debris, accumulated in its depths. Clearance of the well revealed three distinct fills, differentiated by pottery joins. Fill I, extending from 10 meters to the bottom of the well at 10.70, is to be associated with the period of use. Its coins are predominantly issues of the late fourth and third centuries B.C.⁶ Fill II, with a depth of 8 to 9.20 meters, accumulated between 200 and 146 B.C. after the well had ceased to be a water supply. In this deposit were found 25 coins of the Isis head type and the ΚΛΕΟ-ΠΑΤΡΑΣ piece, together with money of Ptolemy III, Corinth, Sicyon, and Histiaea.⁷

⁵ The measurement is that of No. 33 (Pl. 101 b, right); the diameter of No. 34 is not intact. In the case of the last three coins (Nos. 32-34), their condition makes it impossible to tell how much they weighed originally.

⁶ 14 Corinth, 400-146 B.C. (Edwards, *Corinth*, VI, *Coins*, p. 14, No. 11).

1 Corinth, 338-300 B.C. (B.M.C., *Corinth*, p. 35, No. 322).

1 Argos, 350-228 B.C. (B.M.C., *Pelop.*, pp. 143-4, Nos. 98-105).

1 Boeotia, 338-315 B.C. (B.M.C., *Cent. Gr.*, p. 38, Nos. 57-62).

2 Sicyon, 323-251 B.C. (Edwards, p. 52, No. 316).

1 Phlius, 431-370 B.C. (B.M.C., *Pelop.*, p. 34, Nos. 13-17).

3 Philip V, 220-178 B.C. (Grose, *McClellan Coll.*, Nos. 3652, 3653, 3654).

1 Antigonos Gonatas, 277-239 B.C. (Grose, Nos. 3609-3613).

1 Ptolemy III, 247-222 B.C. (Grose, No. 9784).

1 Thera, 4th-3rd cent. B.C. (Grose, No. 7309).

⁷ 2 Ptolemy III, 247-222 B.C. (Grose, Nos. 9784, 9787).

1 Corinth, 400-146 B.C. (Edwards, p. 14, No. 11).

1 Histiaea, 196-146 B.C. (B.M.C., *Cent. Gr.*, p. 128, Nos. 34 ff.).

1 Sicyon, 323-251 B.C. (Edwards, p. 52, No. 319).

Fill III, 2.10 to 8 meters, is the Mummian destruction fill thrown into the well at one time. It is characterized by masses of broken building material and by a very homogeneous collection of pottery connected with some kind of a paint shop. In this upper deposit were found the remaining eight coins of the present hoard as well as 22 other pieces, chiefly of third and second century date.⁸

The 31 Isis head coins and the one marked ΚΛΕΟΠΑΤΡΑΣ were found in almost uninterrupted sequence at a depth of 7.80 to 8.40 meters, six just above the break between Fills III and II and 26 in the first 0.40 meters below the break. Nos. 33 and 34 were nearer the surface at 5.50-5.90 meters.⁹

In all probability the entire group of coins is to be connected with Fill III, the Mummian destruction fill. Infiltration from above would easily explain the presence of the majority at the top of Fill II. Actually it makes little difference with which of the two deposits one associates them. The implication is strong in either case that they represent a hoard closely linked with the catastrophe of 146 B.C. The money may have been secreted in the well for safekeeping prior to the destruction or it may have been hidden in the paint shop above and tossed into the well with the first fragments of debris when a general cleaning up was attempted.

⁸ 6 Corinth, 400-146 B.C. (Edwards, p. 14, No. 11).

2 Sicyon, 251-146 B.C. (Edwards, p. 52, No. 320).

5 Sicyon, 323-251 B.C. (Edwards, p. 52, No. 316 for 4; No. 313 for 1).

2 Sicyon, 323-146 B.C. (Edwards, p. 52, No. 316 or 320).

1 Achaean League, after 280 B.C. (B.M.C., *Pelop.*, pp. 12-15).

1 Philip V, 220-178 B.C. (Grose, No. 3652).

4 Ptolemy III, 247-222 B.C. (Grose, No. 9784).

1 Corcyra, 229-48 B.C. (B.M.C., *Thess.*, p. 146, No. 488).

⁹ Although these last two coins were separated from the others by some two meters of fill, it is likely that they originally formed a part of the hoard. Of approximately 55,000 coins uncovered at Corinth to date, only 151 are Ptolemaic. Their proportions and chronological range are interesting. Excluding those found in Well XIX, the remainder come from deposits scattered throughout the excavations:

- 2 Ptolemy I
- 105 Ptolemy III
- 1 Ptolemy IV
- 1 Ptolemy XIII
- 1 Cleopatra VII

On the basis of evidence to be presented later, it seems clear that our 34 coins were all minted within a relatively short period, probably *circa* 180-168 B.C. No other Ptolemaic money of the second century B.C. has yet been found at Corinth. It is surely more credible, considering the circumstances under which the well was filled, that a few coins became separated from the group as a whole than that these two pieces, connected chronologically with the bulk of our hoard, found their way by chance into the same well at the same time as the other pieces.

There is a bare possibility that the seven bronzes of Ptolemy III from Well XIX are also a part of our hoard since a large issue such as this undoubtedly circulated for many years. However, over 100 coins of Ptolemy III have been dug up in different sections of the excavations, and the seven from our well were discovered in all three fills. There is no reason for linking them specifically with the group of coins under discussion.

The particular significance of our hoard lies in its contribution toward the dating of two controversial issues of Ptolemaic bronze. Despite extensive numismatic research, the coinage of the Ptolemies, with its highly standardized types and legends, still presents numerous problems which can be solved only on the evidence of hoards such as the one from Corinth.

Our type with the Isis head obverse has been attributed to Ptolemy V, to Ptolemy VI during the regency of Cleopatra I, and to Ptolemy VIII.¹⁰ The issue (represented by No. 32 in our hoard) bearing the legend ΒΑΣΙΛΙΣΣΗΣ ΚΛΕΟΠΑΤΡΑΣ has been identified with both Cleopatra I and Cleopatra III.¹¹ As for Nos. 33-34, there is more general agreement that this type was minted during the joint rule of Ptolemy VI and Ptolemy VIII.¹²

With the destruction of Corinth as an indisputable *terminus ante quem* for the burial of our hoard, we can without hesitation reject the identification of the "Cleopatra" issue with the third queen of that name since her coinage began at a much later date. Similarly the Isis head series cannot be connected with Ptolemy VIII, who did not become king of Egypt until 145 B.C.¹³

The elimination of Cleopatra III and Ptolemy VIII makes it virtually certain that our ΚΛΕΟΠΑΤΡΑΣ piece was minted by Cleopatra I and the Isis head money

¹⁰ Svoronos (*op. cit.*, Nos. 1233-35 and No. 1384) divides this Isis head series on the basis of the presence or absence of the P monogram, assigning coins without the marking to Ptolemy V and those with it to Cleopatra I as regent for her son Ptolemy VI. Macdonald in publishing the Hunterian coins follows the same arrangement. In the Weber and De Luynes Collections, both marked and unmarked issues are attributed to Ptolemy V. On the other hand, Feuardent (*Numismatique Égypte ancienne*, I, p. 70) publishes both types as money of Cleopatra I during her regency.

The catalogues of the McClean Collection and the British Museum give the series in its entirety to Ptolemy VIII, although in the latter work, Poole considers it possible that the coins with the monogram belong to Ptolemy VI.

¹¹ Svoronos lists it under Cleopatra I as regent for Ptolemy VI, and Babelon, in publishing the De Luynes Collection, presumably intends the same classification in placing it among the coins of Ptolemy VI. Poole and Feuardent attribute the type to Cleopatra III reigning with Ptolemy X.

¹² The use of two eagles on the coin reverses is not common for the earlier Ptolemaic currency, but it does occur, notably during the reign of Ptolemy II (Svoronos, pls. XVII and XXII). During the first part of the second century B.C., the type appears again, and the various issues are attributed by Svoronos as follows: those with K or P on the reverse to Cleopatra I, those without letter or monogram to the joint rule of Ptolemies VI and VIII. Judging by the number of specimens listed by Svoronos, this two-eagle series is too extensive to be assigned in its entirety to Cleopatra I. Furthermore, there is no other coinage which can be ascribed with any degree of certainty to the reign of the brother Ptolemies. In general, Svoronos' classification seems plausible even though, as Regling points out (*Zeit. f. Num.*, XXV, p. 380), the interpretation of the type as symbolic of joint sovereignty is unconvincing. There is definitely a possibility that Ptolemy VI continued to issue the two-eagle coins during the years when he ruled alone.

¹³ Prior to the death of Ptolemy VI, there were several attempts by Ptolemy VIII to gain control of the country, but it is highly improbable that a bulk coinage could have been issued during his brief intervals of power.

either by the same queen or by her husband, Ptolemy V. It might be useful at this point to glance briefly at the history of Egypt during the early second century B.C. in the hope that it may throw additional light on the currency.¹⁴

After the death of Ptolemy IV, Philopator, his minor son inherited the throne in 204 B.C. as Ptolemy V, Epiphanes. His reign was a disastrous one for Egypt. An ill-advised campaign into Asia Minor, undertaken by the Greek regents Scopas and Aristomenes, resulted in the loss of Coele-Syria and Palestine. Revolts in both Lower and Upper Egypt kept the country in turmoil for years, while the decline in revenue from the Aegean outposts of the empire further aggravated Ptolemy's grave financial difficulties. Unfortunate to the extreme in his administration of Egypt, Epiphanes was highly fortunate in his marriage. In 192 B.C. he wedded Cleopatra, daughter of Antiochus III of Syria, and in her gained a loyal, intelligent wife and queen. The couple had three children, two boys and a girl, of whom the older son was six years of age at the time of his father's death in 180 B.C.

For the second time in some 25 years Egypt had a child king. In this instance, however, affairs of state were in capable hands. The gifted and energetic Queen Mother assumed the regency and for seven years governed the country without the support of male ministers. This Syrian princess, the first of the Cleopatras of Egypt, was a woman of extraordinary character, far more worthy of fame than her better-known descendant, the last queen of that name. Historians agree that she ruled ably and well and that with her regency Egypt enjoyed almost a decade of unprecedented peace, both internal and external.

Shortly before or after Cleopatra's death, *circa* 173 B.C., her son was formally proclaimed king as Ptolemy VI, Philometor, but for a few years thereafter the power rested with two foreigners, Eulaeus and Lenaeus. They were undoubtedly responsible for the decision to attack Syria as a protest against the cessation of the Coele-Syria revenues, which Cleopatra had brought as her dowry and which the Syrians held to have been her personal estate and not a permanent grant to Egypt.

Once again the forces of Syria defeated those of Egypt, and Philometor himself was captured by his uncle Antiochus IV and taken to Memphis. Then followed a strange period in Egyptian history. Antiochus, under the pretext of safeguarding the interests of his young nephew, kept him a prisoner, while official proclamations and even bronze coinage with Ptolemaic types were issued under the name of the Syrian king. Meanwhile at Alexandria, the people, resentful of this foreign intervention, acclaimed Philometor's younger brother as king—the same who was to rule later as Ptolemy VIII, Euergetes II.

At this point Antiochus, fearful of Roman interference and convinced that Egypt

¹⁴ The historical résumé which follows is based on Bouché-Leclercq, *Histoire des Lagides*, II; Bevan, *A History of Egypt under the Ptolemaic Dynasty*; Macurdy, *Hellenistic Queens*; Strack, *Die Dynastie der Ptolemäer*; Elgood, *The Ptolemies of Egypt*.

was on the verge of a bloody civil war from which Syria would ultimately profit, felt that there was no advantage in further prolonging his campaign. Accordingly, he took the first reasonable opportunity to break off hostilities and return to Syria. Egypt for some months was a divided kingdom; both brothers refused to surrender their prerogatives. The critical situation was saved by Cleopatra II, sister and wife of Philometor, who persuaded her brothers to put aside their differences and share the royal power. This union, established in 170 B.C., was to last for six years.¹⁵

From the beginning of the joint reign the threat of Syrian intervention hung over the brother kings, and their fears were realized *circa* 168 B.C. when Antiochus thought the time propitious for another campaign against Egypt. His armies stood at the gates of Alexandria; only the mandate of Rome saved the city from siege. An emissary, dispatched by the Senate, demanded that Antiochus retire from Egypt, and the Syrian king, still reluctant to provoke the Republic, complied.

For two years the brother Ptolemies had been united in the face of the danger from abroad. Now it became apparent that there was no room in Egypt for two kings. Repeated attempts by Euergetes II to seize the throne for himself finally forced the rightful king to leave the country and plead his case at Rome. The Roman decision awarded Egypt to Philometor and gave Euergetes the regency of Cyrenaica. An uneasy truce of this nature endured from about 163 B.C. until the death of Philometor in 145 B.C., at which time Euergetes became king in his own right as Ptolemy VIII.

The history of the period, taken in conjunction with the *terminus ante quem* of our hoard, supports Svoronos' assignment of our ΚΛΕΟΤΤΑΤΡΑΣ and Isis head types to Cleopatra I during the seven years that she served as regent. Concerning the first issue, there can be no doubt that it must belong to either Cleopatra I or II. While it would have been most unusual for either queen to have had her name inscribed on the obverse of a standard denomination during her husband's lifetime,¹⁶ it would, on the other hand, have been extremely logical for Cleopatra I to have placed the legend there after she assumed the regency. In the beginning at least there must have been a certain insecurity inherent in the novelty of her position. What better means could she find of affirming her status than by a new issue of coinage prominently marked with her name and royal title. The unit and fractional pieces bearing the legend ΒΑΣΙΛΙΣΣΗΣ ΚΛΕΟΤΤΑΤΡΑΣ may well represent the first money of the new regent.

¹⁵ In connection with the fourth volume of the Rylands Papyri, Eric G. Turner publishes a vineyard lease (*Bulletin of the John Rylands Library*, XXXI, pp. 148-161) which takes the joint reign of Philometor, Euergetes and Cleopatra II back to the autumn of 170 B.C. Consequently the first invasion of Antiochus IV, often dated in the spring of 169 B.C., must have occurred at least a year earlier.

¹⁶ The association of the earlier queens of Egypt with the coinage was largely limited to special gold and silver issues, often commemorative, with the name of the queen inscribed on the reverse. An exception was Berenice II, wife of Ptolemy III. Fractional bronze pieces, bearing her name and royal title on the obverse, were struck in Phoenicia (Svoronos, pl. XXXI).

As the regime became more firmly established, there was less reason for continuing the obverse inscription. The Isis head pieces do not bear the name of the queen, but the type itself, whether introduced by Cleopatra or carried over from her husband's coinage,¹⁷ was highly appropriate. Throughout their reign Ptolemy V and Cleopatra had identified themselves with the gods Sarapis and Isis in the tradition of their predecessors, Ptolemy IV and Arsinoe.¹⁸ Upon the death of Ptolemy V, it was fitting that the widowed queen continue the association of herself with the great goddess of Egypt, the tutelary divinity to whom she consigned herself and her young son.

Attribution of the ΚΛΕΟΠΑΤΡΑΣ and some at least of the Isis head coins to Cleopatra I is confirmed by the money which Antiochus IV minted during his occupation of Egypt in 170 B.C.. The Seleucid king was responsible for four distinct bronze issues (Svoronos, pl. XLVIII, 1-5, 7), of which two are particularly significant. One combines an Isis head obverse with an eagle on the reverse; the other, the head of Zeus Ammon and two eagles. Antiochus' adoption of these uncommon Egyptian types would indicate that he was imitating issues in current circulation—the choice perhaps inspired by political considerations as a shrewd bid for the favor of the Egyptian people. Antiochus must have realized that his occupation of the country and his custody of the young king required justification. By using the distinctive coin types of his sister Cleopatra, he emphasized his relationship with the dead regent and consequently his suitability as the guardian of her son.¹⁹

¹⁷ As has been noted before, Svoronos divides the Isis head coins under discussion between Ptolemy V and Cleopatra as regent, attributing the pieces without α to the earlier period and those with the monogram to the regency. Actually there is still a third variation of the type (illustrated only in Svoronos, No. 1491; pl. LI, 10) separated from the other Isis head coins by differences in the rendering of the hair and wreath, the heavy treatment of the obverse portrait, and generally larger flans. There is no monogram on the reverse. The issue Svoronos assigns to the joint rule of 170-164 B.C., but it seems more likely that it belongs at the beginning rather than at the end of the series. If it was struck by Ptolemy V, perhaps the other Isis head pieces without monogram should, as Svoronos indicates, also be attributed to that period, or it may be that the difference in the style of the obverse, rather than the presence or absence of the monogram, marks the division between the coinage of Cleopatra and that of her husband. In any event the coins of our hoard, linked as they are by the α monogram with other issues definitely minted under Cleopatra, almost certainly belong to her regency.

¹⁸ Inscriptions and dedications, including the Rosetta decree, refer to Ptolemy V as the son of Isis (Svoronos, *op. cit.*, p. $\tau\lambda\delta'$). Poole (B.M.C., *Ptolemies*, p. lviii) interprets the radiate diadem and corn-ear symbol on his coinage as evidence of association with Sarapis.

The tetradrachms with the jugate busts of Sarapis and Isis, formerly placed among the coins of Ptolemy V, are now more generally attributed to Ptolemy IV (E. T. Newell, *Numismatic Notes and Monographs*, No. 33, p. 8).

¹⁹ It should be noted that E. T. Newell regards the coinage of Antiochus with Ptolemaic types as a commemorative series struck at Antioch after the conclusion of the Egyptian campaigns ("The Seleucid Mint of Antioch," *American Journal of Numismatics*, LI, 1917, pp. 24-27). Basically the mint attribution does not affect our argument that these extraordinary issues of Antiochus were modelled on Egyptian money in current circulation and are, therefore, supporting evidence

We have, then, in our hoard a compact group of coins: 32 of them issued by Cleopatra I between 180 and 173 B.C. and the other two pieces by Ptolemy VI and Ptolemy VIII during their royal partnership of 170-164 B.C. Considering the proportions involved, one might suggest that the hoard was assembled in the first years of the joint reign before the coinage of the brother Ptolemies had had time to circulate widely, perhaps *circa* 170-168 B.C.

The Corinthian provenance presents certain problems in view of the scarcity of Ptolemaic money from the excavations at Corinth. Nearly 55,000 coins have been unearthed to date but only 151 are Egyptian pieces, with the 34 coins of the present hoard included in this total. Of the remaining 117 specimens, 112 were minted by Ptolemy III.

It would seem that some explanation other than a commercial one must be found to account for the presence of our bronze hoard in a Corinthian well. On the whole, there is much to be said for the theory that it was accumulated by a Corinthian mercenary who entered the service of the Ptolemies and returned after his discharge to his native city, bringing with him whatever he had been able to save from his earnings.

Mercenary forces were widely used in the Hellenistic world. The Ptolemies, like the monarchs of Asia Minor, waged war to a large extent with hired troops in whose fidelity they placed greater confidence than in that of their own people. The high cost

for the assignment of the original pieces to Cleopatra I. However, the question of the issuing mint is an intriguing one, which I have discussed at some length with Aline A. Boyce, who is now working on this series, among others, in connection with a forthcoming publication of the Gautier Collection. We both feel there is still much to be said in favor of the usual attribution to Egypt.

Allowing for certain qualities of style which are Seleucid rather than Ptolemaic, the fact remains that, in fundamentals of denomination and types, practically all of the coins are in the standard Egyptian tradition and correspondingly non-Syrian in character. We know that Antiochus did use an Egyptian mint during his occupation, for there is one issue with his name and two eagles on the reverse (Svoronos, pl. XLVIII, 7) which was undoubtedly, as Newell points out, struck in Egypt. The mint in question cannot have been Alexandria, to which Antiochus never had access, but must have been a provincial workshop, probably in Memphis. While copper from the Sinai mines would have been available for its operation, technical skill was another matter. It seems likely that die-cutters, or at least a supervising artisan, had to be imported from Syria, which would account for the anomalous character of the resulting coinage.

One of the strong arguments against an Egyptian mint is the fact that the coins are not found in Egypt—the majority of the pieces with recorded provenance come from Syria. Nevertheless one might justifiably assume that this extensive coinage was intended for military as well as civilian use, in which case much of it would have found its way to Syria with Antiochus' troops. As to the pieces circulating in Egypt, would not the brother Ptolemies after the establishment of their joint rule have made every attempt to call in these reminders of invasion and occupation? In all, one can understand the practical necessity for this pseudo-Ptolemaic money during Antiochus' stay in Egypt; it is harder to see why after his return to Syria he cared to commemorate to such an extent his unfruitful, though technically victorious, campaigns, the second of which, moreover, had been terminated under distinctly humiliating circumstances.

of living at home made the prospect of foreign service attractive to the poorer Greeks, and there are frequent historical references to their employment abroad.²⁰ In 221 B.C. mercenaries, among them 3,000 Peloponnesians, composed a majority of the troops on guard at Alexandria. The campaign of Ptolemy V against Antiochus the Great was waged with the help of recruits from Aetolia, of whom 6,500 were enlisted by Ptolemy's emissary Scopas. Presumably even more men could have been inducted had not the general of the Aetolian League expostulated against any further draining of the country's youth.

Toward the beginning of the second quarter of the second century B.C., about the time our hoard was being accumulated, Egypt still required large bodies of mercenary troops. The armies of Eulaeus and Lenaeus, invading Coele-Syria in 171/170 B.C., unquestionably included hired soldiers, and Polybios²¹ states that Philometor and Euergetes, early in their joint reign, tried to protect themselves against Antiochus IV by requesting reinforcements from the Achaean League and a mercenary force of 1,000 men from Theodoridas of Sicyon.

There can be little doubt that Corinthians were to be found in the ranks of the Ptolemaic armies. So great was the traffic in military service that Griffith²² suggests the possibility that Athens and Corinth, because of their location and importance, became permanent rallying points for prospective soldiers and for recruiting officers. In any event, Corinth by her geographical position must have often witnessed the passage of men from Achaia and from Aetolia on their way to foreign lands, and it would have been strange if some Corinthians, dissatisfied by conditions at home and excited by stories of good pay and easy living abroad, had not joined the mercenary forces.

Assuming that a "mercenary" origin for our hoard is valid, it would be interesting to know what value the individual coins had, how this related to the prevailing wage scale for soldiers in second century Egypt, and why the hoard was kept intact for some twenty years between the time of its probable accumulation and the destruction of Corinth. Given the present state of knowledge, any conclusions must remain highly speculative.

We know that in Pergamon and probably elsewhere, the military contract was a yearly one, and that payment in Egypt was made on a monthly basis, partly in cash and partly in kind. As to how much the average mercenary received about 170 B.C., there is no definite record. A papyrus of *circa* 158 B.C.²³ gives the monthly salary of a soldier stationed at Memphis as 150 bronze drachms and three *artabae* of wheat,

²⁰ References to mercenary forces are taken from G. T. Griffith, *The Mercenaries of the Hellenistic World*, based primarily on the accounts of Polybios, Livy and other historians.

²¹ XXIX, 23-27.

²² *Op. cit.*, p. 256, with reference to Xen. *Hell.*, VI, 5, 11 and VII, 3, 4.

²³ Wilcken, *Urkunden der Ptolemäerzeit*, I, 14.

of which one was paid in kind and the other two redeemed at 100 bronze drachms each. At Thebes about 130 B.C. a troop of mercenary horse received 56 *artabae* of wheat as a month's food allotment, of which 13 were paid in kind and the remaining 43 commuted into cash. In addition the troop was paid 2785 bronze drachms.²⁴ Without knowing the exact number of men involved, one cannot arrive at the individual wage, but if each horseman, like the guard at Memphis, received one *artaba* of wheat in kind for his monthly food needs—and it is hard to see how he could be given any less—the troop consisted of 13 men. On this basis the average monthly wage was about 200 bronze drachms, with allowance made for difference in rank. This figure is in line with the pay scale of the Memphis papyrus in that the cavalryman was traditionally better paid than the ordinary soldier.

There are indications, however, that wages in 158 and 130 B.C. were higher than at the end of the first quarter of the second century. Between the years 173 and 168 B.C. Egypt experienced a disastrous inflation, probably due to the invasion of Antiochus and the widespread plundering that followed.²⁵ In 173 B.C. wheat sold for 125-160 drachms an *artaba*; by 162 B.C. it had jumped to 500 drachms. At the end of the third century B.C. a house was valued at 66 silver drachms; in the "time of troubles" about 169 B.C., houses were selling for as much as 168 silver drachms.²⁶ As further evidence of the inflation, Heichelheim in his study of the period cites a letter (*U.P.Z.*, 59), to be dated *circa* 168 B.C., in which a woman complains to her husband that she and her child are in the greatest need due to the soaring food prices.

The effect of the inflation on wages is reflected in the papyri records. In 180 B.C., or a few years earlier, construction and agricultural workers were getting 20-30 bronze drachms a day;²⁷ in 158 B.C. a stoker at Memphis was making 45 a day.²⁸ Over a period of 22 years the wage scale in Egypt had increased by at least 100 per cent, perhaps even more if the seasonal laborer were better paid than one with regular employment. Under the circumstances one might assume that a mercenary in the Egyptian army *circa* 170 B.C. received about half as much in cash payments as his successor in 158 B.C. A monthly wage of 80-100 bronze drachms seems a reasonable figure.²⁹

²⁴ Wilcken, *Actenstücke*, VI and Commentary.

²⁵ F. Heichelheim, *Wirtschaftliche Schwankung der Zeit von Alexander bis Augustus*, pp. 30-32. Hieronymus (*Comment. in Daniel.*, XI. 21 ff.) gives a vivid account of the depredations of Antiochus.

²⁶ Wheat prices are given by A. Segrè, "The Ptolemaic Copper Inflation ca. 230-140 B.C.," *A.J.P.*, LXIII, 1942, pp. 175 ff.; the cost of housing is taken from Heichelheim (*op. cit.*, pp. 85-86). The latter figures must be regarded as confirmation rather than proof of inflation since houses certainly varied in value at all times.

²⁷ Segrè, *op. cit.*, p. 180, citing *B.G.U.*, 1290, *P. Tebt.*, 886, and *P. Mich.*, III, 200.

²⁸ *U.P.Z.*, 99.

²⁹ A different calculation would give roughly the same sum. In 158 B.C. the stoker received some 1300 bronze drs. on a monthly basis; the Memphis soldier with his *artaba* of wheat valued

Any attempt to relate this sum to the bronze denominations of the Ptolemies plunges one into such a maze of speculation and controversy that one tends to agree with Segrè, "it is mere curiosity to try to ascertain the value of the copper coins." Certainly it would be ridiculous to use our small hoard as the basis for a new classification, but it might be interesting to see whether any existing theory provides a plausible valuation for the coins.

The historical and numismatic evidence relative to the worth of the Ptolemaic bronze pieces is definitely limited. While Egypt maintained a silver standard, the bronze denominations were apparently intended as multiples and fractions of the obol, which was the name given the typical bronze coin as opposed to the stater in silver. By the end of the third century B.C. the country had shifted from silver to bronze, with payment in the latter metal being common practice at home and abroad. The bronze drachm became the unit of reckoning, but the fact that the later papyri accounts use obols and bronze drachms interchangeably in recording conversion rates, would indicate that there was still a bronze denomination known as an obol which was equivalent to a certain number of bronze drachms.

From the papyri again, we learn that the exchange ratio of the silver and bronze drachms fluctuated considerably. About 237 B.C. it stood at 1:1 with an agio of approximately 10 per cent favoring the silver; over the next half century the value of the bronze gradually depreciated until *circa* 170 B.C. it seems to have exchanged with the silver at a 120:1 ratio. With the inflation the ratio soared as high as 600:1, followed by a levelling-off during the latter half of the century so that from then until the time of Cleopatra VII it ranged between 400-500:1.³⁰

at 400-500 drs., his two *artabae* converted at 100 drs. each and his cash payment of 150 drs. received 750-850 drs., or about one-third less than the workman. In 180 B.C. a laborer averaged perhaps 600-700 bronze drs. per month. Crediting a mercenary with an *artaba* of wheat at 150 drs., and two others exchanged at 100 drs. each, an additional cash payment of 80-100 drs. would bring his monthly wage to about two-thirds that of the workman.

Even with a lower monthly wage the soldier would have been better off than the laborer, in escaping part if not all of the latter's expenditures for clothing and taxes. Moreover, he could count upon a bonus after a successful campaign. The Egyptian mercenary of the third century B.C. must have been well rewarded for his services, as witness the advice to a prospective soldier in Theocritus (*Idyll* XIV), "If you are thus determined to go abroad, Ptolemy is the very best of pay-masters to a free-man." The situation had changed, however, before the middle of the second century B.C. Heichelheim (*op. cit.*, p. 104) points out that the marked decline in Greek migration to Egypt under Ptolemies VI and VIII is politically attributable to the deterioration of the Ptolemaic empire and economically understandable if one contrasts wage levels with prevailing prices.

³⁰ The ratios are taken from Segrè, "Ptolemaic Copper Inflation," pp. 175-177; Grenfell-Hunt-Smyly, *The Tebtunis Papyri*, I, Appendix II, pp. 580-603; F. Heichelheim, *Wirtschaftliche Schwankungen*, p. 28. It should be noted that there is often a diversity of opinion regarding the ratio at any given period, due to differing interpretations of the date and meaning of the papyri evidence. While the earliest and latest rates of exchange are fairly well documented and there seems clear indication of a high ratio for the inflation period (*P. Tebt.* 1087 and possibly *P. Petrie*, II, 39 d), the 120:1 rate of *circa* 170 B.C. is less certain.

Despite these fluctuations which must have been reflected in the currency, the bronze coinage as a whole is strikingly homogeneous, leading one to the conclusion that coins of approximately the same size and weight were issued in succeeding reigns but that their value in bronze drachms changed with the inflation of prices and the alteration in the ratio of the silver and bronze. Unfortunately there is no indication on the coins themselves as to what their drachm value may have been at any given period, except in the case of two issues of Cleopatra VII, stamped with a Π and a Μ. It was Regling who first interpreted the letters as marks of value, signifying 80 and 40 bronze drachms respectively. In this connection, our hoard consists almost entirely of coins corresponding in weight and size to the 80 drachms issue of Cleopatra.

This standard bronze denomination, with an average diameter of some 28 millimeters and a weight of 15-18 grams, has been identified by Grenfell and Hunt as an obol. Milne, in doing the same, makes specific reference to our Isis head type, which he describes as of most frequent occurrence in hoards.⁸¹ Yet if we assume that an obol had a value of 80 bronze drachms at the time of Cleopatra VII, it is evident that such was not the case at all periods.

Originally the largest denomination of Ptolemaic bronze, which is roughly six times the weight of the Isis head piece, may have been intended as the bronze equivalent of a silver drachm at a time when silver and bronze held a 1:1 ratio. The denomination comparable in size to our coins would then have had the value of a silver obol. This correlation would be tenable so long as the silver and bronze exchanged on more or less equal terms. In the reign of Epiphanes the silver standard gave way to the bronze, and accounts began to be reckoned commonly in bronze drachms. Since coins of the same size and weight continued to be issued, they would logically have been revalued in terms of the current ratio between silver and bronze, and with the repeated depreciations of the bronze drachm, they would have required successive revaluations. About 170 B.C., given a ratio of 120:1, the obol should have been worth 20 bronze drachms; a few years later as a consequence of the inflation and the 600:1 relationship of silver and bronze, the same denomination would represent 100 drachms. With the steadying of the exchange rate at about 400-500:1, it is probable, as Milne suggests, that the government decided to equate the obol with 80 bronze drachms instead of 100.

Without stressing the point, there is at least a possibility that at the time our hoard was accumulated each Isis head piece had a value of approximately 20 bronze drachms. Let us imagine our Corinthian mercenary with a straight wage of four or

⁸¹ Among the more recent discussions of the Ptolemaic bronze denominations and their value are those of T. Reinach (*Revue des Études Grecques*, XLI, 1928, pp. 122-196); J. G. Milne (*Journal of Egyptian Archaeology*, XXIV, 1938, pp. 200-207, and *Annals of Archaeology and Anthropology*, I, 1908, pp. 30-40); Grenfell and Hunt (*The Tebtunis Papyri*, I, Appendix II); and A. Segrè (*Circolazione Tolemaica e Pretolemaica in Egitto* and *Metrologia e Circolazione Monetaria degli Antichi*).

five obol pieces per month plus a food allowance sufficient to cover his basic needs.³² If he were of a thrifty nature, he might well have saved from the cash allotment for a year's campaigning, the 34 coins of our hoard.

The unusual circumstances of the hoard indicate that there was a special reason for its secretion. One would suppose that a Greek mercenary returning home with foreign money would ordinarily have tried to dispose of it by conversion into local currency. This would have been particularly true of bronze pieces which were not circulating freely in Corinth. In the normal course of events there should have been little difficulty. The mercenary could have counted upon finding, in a large center like Corinth, a recruiting officer or a trader bound for Egypt who would have taken his money and given him equivalent value in Greek coins.

Our hypothetical mercenary, however, had chosen an unfortunate time for his service in Egypt. The struggle with Antiochus had brought the country to the verge of chaos and economic collapse. Even before his term of enlistment was up, the soldier may have experienced a depreciation in the purchasing power of his drachms; by the time he returned home, the money was practically worthless in view of the tremendous rise in prices about 168 B.C. Moreover, considering the troubled opening years of the joint reign of Ptolemies VI and VIII, it is to be doubted that the necessary revaluation of the currency could have been undertaken immediately. Our soldier, then, had Egyptian coins with a negligible exchange value. Perhaps he put them aside, hoping that the situation would improve, and had no subsequent opportunity of trading them; perhaps he signed for military service elsewhere, planning to try again to exchange his obols after his return, and did not survive the campaign. Whatever the explanation, the little hoard was concealed in the well or in the paint shop above and abandoned until the destruction of the city in 146 B.C. buried it for another 21 centuries.

MARGARET THOMPSON

THE AMERICAN NUMISMATIC SOCIETY

³² Heichelheim (*op. cit.*, pp. 102-105) estimates that an Egyptian workman's annual food budget called for a minimum expenditure for grain of a sum equivalent to the value of 10 *artabae*, with the same amount spent for wine, oil and relishes (*opsonion*). A. C. Johnson feels that this allowance for *opsonion* is probably too high (*Roman Egypt to the Reign of Diocletian*, p. 304, being Vol. II in *An Economic Survey of Ancient Rome*). In any case the mercenary, receiving each month one *artaba* of wheat in kind and a cash return from the conversion of additional *artabae*, should have found this entirely adequate for his food requirements. There would be no need of drawing upon his wages for anything except incidentals.





Numbers 1-20



Numbers 21-40



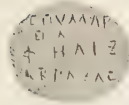
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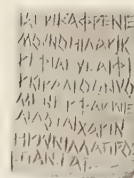
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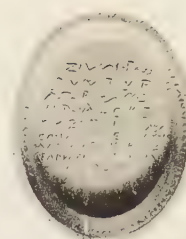
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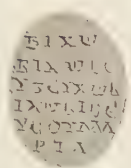
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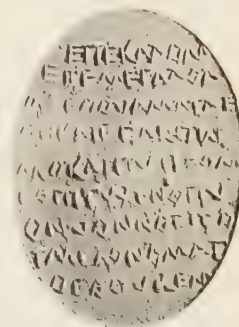
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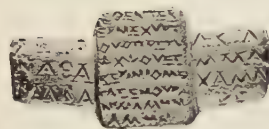
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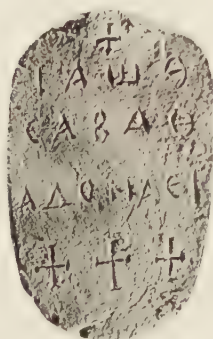
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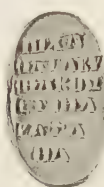
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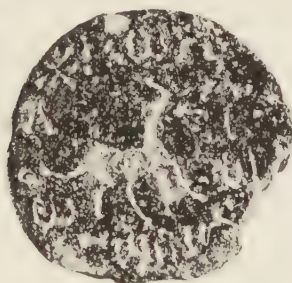
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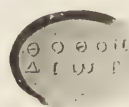
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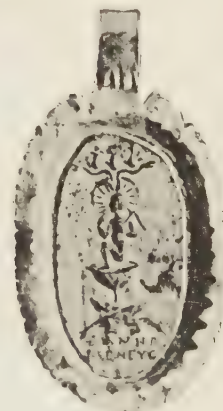
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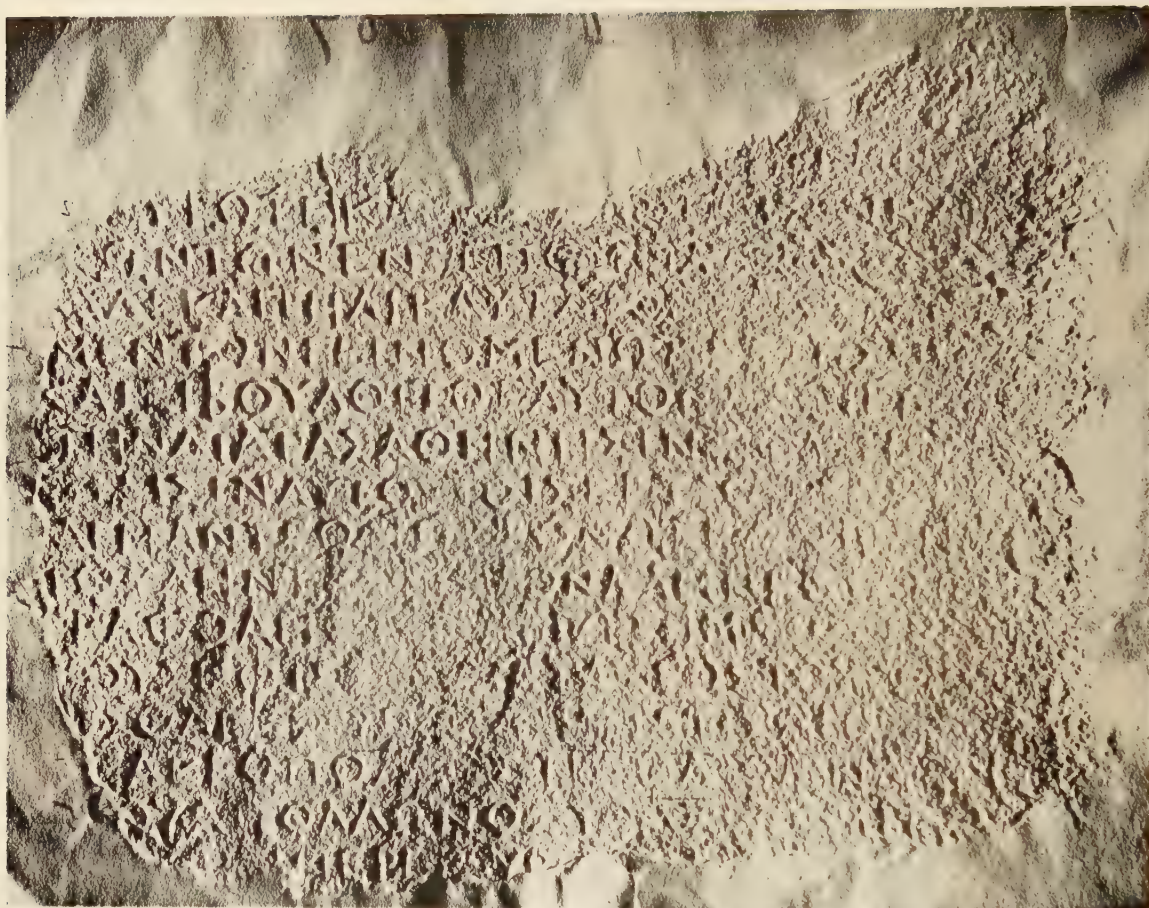
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CAMPBELL BONNER: AMULETS CHIEFLY IN THE BRITISH MUSEUM



I. G. II², 1064—*Hesperia*, Supplement VI, No. 31, Fragment d. Photograph (printed in reverse) of squeeze belonging to the Akademie der Wissenschaften in Berlin. Through the courtesy of Günther Klaffenbach.

J. H. OLIVER: ON THE ATHENIAN DECREES FOR ULPIUS EUBIOTUS



MARGARET THOMPSON: A PTOLEMAIC BRONZE HOARD FROM CORINTH

HESPERIA

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- Volume I, Part II: ARCHITECTURE. By RICHARD STILLWELL, ROBERT L. SCRANTON, and SARAH ELIZABETH FREEMAN, with contributions by H. ESS ASKEW. xvi + 243 pages. Quarto. Cloth. Frontispiece in color; 189 figures in the text, 20 folio plates in a portfolio. 1941. \$12.50.
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- Volume III, Part II: THE DEFENSES OF ACROCORINTH AND THE LOWER TOWN. By RHYS CARPENTER and ANTOINE BON, with contributions by A. W. PARSONS. xvi + 315 pages. Quarto. Cloth. 242 illustrations, 10 plates, 1 map. 1936. \$7.50.
- Volume IV, Part I: DECORATED ARCHITECTURAL TERRACOTTAS. By IDA THALLON-HILL and LIDA SHAW KING. xii + 120 pages. Quarto. Cloth. 48 illustrations, 5 colored plates. 1929. \$7.50.
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- SELECTED BINDINGS FROM THE GENNADIUS LIBRARY. 38 plates in color with introduction and descriptions by LUCY ALLEN PATON. 33 pages. 1924. \$35.00.

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MALCOLM FRANCIS MCGREGOR

VOLUME I: The basic evidence, with the reconstruction of the epigraphical texts, a register of tribute payments, a gazetteer, and testimonia. Published in 1939: xxxii + 605 folio pages with 192 figures in the text, 25 plates, and a map. Cloth, Price \$20.00.

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GENNADEION MONOGRAPHS III

**MEDIAEVAL AND RENAISSANCE
VISITORS TO GREEK LANDS**

By JAMES MORTON PATON
(Edited by L. A. P.)

This book is a miscellany in which the individual chapters are bound together by their common concern with the history of Athens and the Near East. There are three main sections, which comprise respectively a series of brief descriptions of Athens, the story of the life and writings of Rinaldo de La Rue, and the diary of a French officer who visited Athens and the Aegean in 1699. There is also an appendix on Athens under the Acciaïoli, and in the body of the book are three fairly popular chapters on Turkish Athens, the Wyche baronetcy and travels, and the Company of Senegal.

The material in the book is derived principally from unpublished manuscripts and from other texts not always easily available, and is presented with copious and amply documented notes. The twenty-one brief descriptions of Athens and of other Greek lands were written by visitors of varied nationality, station, occupations, and interest, who treat in their own way of the mythology, history, and monuments of the Greece that they knew. The sections on La Rue recount his life in France and Italy and tell of his service with Morosini's army in Greece. They are followed by narratives attributed to him which relate to Athens and to Martinique, and are supplemented by his letters. The diary of 1699 is especially important as the earliest description known at present of Athens after the departure of the Venetians in 1688.

Although primarily concerned with the periods of the Middle Ages and the Renaissance, the texts and the discussions of them have their full share of interest for the Classical Archaeologist. The volume as a whole shows the high quality of scholarship and the care in research which the reader has come to expect of Mr. Paton, and which since his death have been admirably and conscientiously maintained by his sister, to whom fell the duties of final editorship.

Published in February, 1951. xii + 212 pages. Royal octavo. Boards. \$7.50.

HESPERIA SUPPLEMENT IX

HOROI

STUDIES IN MORTGAGE, REAL SECURITY, AND LAND TENURE IN ANCIENT ATHENS

By JOHN V. A. FINE

In this volume the thirty-three new horos mortgage stones found in the Athenian Agora and two other new ones are published. To them are added references to all known previously published horos mortgage stones, with the texts quoted for all those which have appeared elsewhere than in *I.G.*, so that a corpus of horos mortgage texts is assembled.

Preparation of commentary on the new inscriptions carried the author into a reconsideration of all evidence available for the understanding of the types of contracts involved. In chapters on Horoi, Ὑποθήκη, Μίσθωσις οἴκου, Ἀποτίμημα προικός, and Πράσις ἐπὶ λύσει, he reanalyses the evidence from literature, especially from the 4th century Attic orators, in the light of the new evidence offered by the inscriptions. The recent theories of Paoli and Meletopoulos regarding the nature of the contracts he analyses closely and finds untenable. Finally in the chapter on Mortgage and Land Tenure are set forth the conclusions to which the preceding study of types of contracts has led. They are in contradiction to previously accepted ideas: there is no evidence for the use of the mortgage contract in Athens before the Peloponnesian War and "both the evidence and the significant absence of evidence point to the conclusion that Attic land remained inalienable until the old taboo on alienability was gradually undermined by the terrific impact of the Peloponnesian War and the plague."

The new evidence and its interpretation here offer an important new chapter in the study of Athenian private law and its implications for social history.

Published October, 1951. viii + 216 pages, 7 colotype plates. Quarto. Paper. \$7.50.

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CORINTH

RESULTS OF EXCAVATIONS CONDUCTED BY
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VOLUME I, PART III:
MONUMENTS IN THE LOWER AGORA
AND
NORTH OF THE ARCHAIC TEMPLE

By ROBERT L. SCRANTON

Part III of *Corinth I* continues the publication of the architectural remains in the general area of the Agora. The volume includes the monuments which limit the Agora at the west, those which run through the center of the Agora separating the Lower from the Upper Agora, those immediately above Peirene facing onto the Agora, Roman monuments in the Lower Agora area, and finally the buildings on the north slope of the hill on which stands the archaic temple. Since the area of the Lower Agora has not yet been dug to the Greek level, this volume is concerned with the buildings and topography of the Roman period: temples on the West Terrace; shops, circular monument, Dionysion and Bema on the central terrace, and isolated monuments in the open Agora. Both the Greek Painted Building and the North Stoa and the Roman Market north of the archaic Temple are treated.

This volume with the parts already published completes the architectural and topographical study of the Lower Agora and its periphery in Roman times, except for the Basilica at the east end, and adds a significant chapter to the study of civic architecture and planning in Greece in the Roman period.

Published September, 1951. xv + 200 pages with 83 figures in the text, frontispiece and 76 collotype plates and 15 folding plans. Quarto. Cloth. \$10.00.

VOLUME XIV
THE ASKLEPIEION AND LERNA

By CARL ROEBUCK

This publication of the temenos of Asklepios and the adjoining fountain of Lerna includes the study of both the topography and architecture of the site and the large number of dedicatory objects found in the area. The temple and altar, fountain and water system in the colonnaded temenos, the ramp connecting it with the fountain house of Lerna and its several reservoirs, colonnaded court and dining room are described architecturally as they appeared in their several periods and restored. Wells in the area yielded an unusually extensive and interesting collection of dedications, chiefly terracotta parts of the body, dating from late 6th to late 4th century B.C. These and the significant pottery found are catalogued. An Early Christian cemetery and two later Christian chapels succeeded the Asklepieion on the site; an account of their scanty remains completes the volume.

As one of the few Asklepieia of Greece which have yielded valuable information for the history of the cult of Asklepios, the Corinth sanctuary is significant for the light it sheds on practises especially of the 4th century and Hellenistic period. Its collection of dedications is unparalleled in Greece.

Published June, 1951. xi + 183 pages with 34 figures in the text, 69 collotype plates and 5 folding plans. Quarto. Cloth. \$10.00.

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